Lessons from the Practice of Marine Spatial Planning: Teaching Case Studies

Image: U.S. Coast Guard Sector San Francisco

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Case Studies of Marine Spatial Planning Report Series
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What can be learned from the real-world experience of marine spatial planning?

Overview: The Coastal Resources Center and the Rhode Island Sea Grant College Program at the University of Rhode Island Graduate School of Oceanography recently conducted in-depth research on three cases of marine spatial planning (MSP) in the U.S. to document practice and share lessons learned. The materials presented here are based on that research and designed to bring college and graduate students into the practical challenges and opportunities of marine spatial planning. This document includes three teaching case studies, loosely based on the case teaching approach pioneered by Harvard Business School.[1] Each case comprises a short narrative, based on recent events and practitioner and stakeholder interviews, recounting stories from the field but excluding analysis, which is left to your students. Each narrative is accompanied by suggested discussion questions, accompanying readings and additional resources. The overarching goal is to bring your students directly into practitioners' recent, real-world marine spatial planning experiences and connect their academic studies of marine spatial planning and coastal and ocean management with practice.

Recommended Uses: These three cases are designed for upper-level undergraduates or graduate students. They may be used individually or as a series (suggested sequencing outlined below). All of the cases require students to be grounded in basic MSP and coastal/ocean management concepts and are most effective when utilized alongside the scholarly literature on marine spatial planning and management. See each case for specific recommendations of accompanying readings and additional resources.

Case #1: The 34th America's Cup Races in San Francisco Bay: A Case Study of Small-Scale Marine Spatial Planning and Management. This case tells the story of the U.S. Coast Guard's work with partner agencies and the local Harbor Safety Committee to plan for and manage a complex, high-profile series of yacht races in 2012 and 2013. It is accompanied by questions and materials to prompt discussion on the characteristics of the MSP approach (e.g., ecosystem-based, integrated) as well as the general stages of a marine management initiative (e.g., issue identification and assessment). If the three cases are used together, it is recommended to introduce this case first as it provides a broad overview of marine spatial planning.

Case #2: Drivers, Goals and Objectives in Coastal and Ocean Management: A Case Study of Washington Coast Marine Spatial Planning, 2010-2015. This case tells the story of how key planning drivers have shaped the Washington State Pacific Coast MSP effort to date and how planning goals and objectives were developed to respond to drivers and address stakeholder concerns. It is accompanied by questions and materials designed to prompt discussion and analysis of these key aspects of planning practice. If the three cases are used together, it is recommended to introduce this case second as it focuses on considerations that are most relevant before a planning process begins or is in its earliest stages.

Case #3: The Rhode Island Ocean Special Area Management Plan: A Case Study of Fishermen Stakeholder Involvement in Marine Spatial Planning. This case tells the story of fishermen's involvement in Rhode Island's marine spatial planning effort, which led to the siting and construction of the United States' first offshore wind farm. It focuses on the plan implementation/energy development phase and is accompanied by questions and materials designed to prompt discussion about various stakeholder engagement techniques and the best tools and strategies to engage key stakeholder groups. If the three cases are used together, it is recommended to introduce this case last as it engages students in thinking about both plan implementation and stakeholder engagement throughout all phases.

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[1] See e.g. Barnes, L., C. Christensen and A. Hansen. 1994. *Teaching and the Case Method: Text, Cases, and Readings*. 3rd Ed. Boston, MA: Harvard Business School Press.

The 34th America's Cup Races in San Francisco Bay: A Case Study of Small-Scale Marine Spatial Planning and Management

Goal

Students will understand both key characteristics of the marine spatial planning (MSP) approach and the general stages of a marine management initiative by analyzing the planning and implementation process for the 34th America's Cup races in San Francisco Bay (2011-2013) in California, U.S.

Learning objectives

Through reading and discussing this case study, students will:

1. **Identify** key characteristics of the MSP approach as illustrated through the small-scale case of the 34th America's Cup waterways management planning and implementation**.**
2. **Understand** the general stages of a marine management initiative by applying one model of the policy process, the "Integrated Coastal Management Policy Cycle," to the case of the 34th America's Cup.
3. **Critically analyze** the 34th America's Cup plan development and implementation as an example of MSP and the policy process more broadly.

Educational level

Undergraduate upper division; graduate school

Keywords

marine spatial planning; coastal management; use conflicts; policy process; policy cycle; integrated coastal management

Teaching This Case Study

This case study has been developed for students who have been introduced to coastal and ocean management concepts and tools; the concept and some examples of marine spatial planning; and basic tenets of public policy, including one or more models of the public policy process. When teaching this case, we recommend using select accompanying materials (listed below) to help students connect this case with tools used by MSP and coastal management practitioners to guide their work. If you wish to delve more deeply into this case, and to connect it with the scientific literature, see "Expanding the Discussion" (below) for other suggestions of discussion questions and resources.

Accompanying materials

Ehler, B. and F. Douvere. 2009. *Marine Spatial Planning: A Step by Step Approach toward Ecosystem-Based Management.* Intergovernmental Oceanographic Commission and Man and the Biosphere Programme. IOC Manual and Guides No. 53, ICAM Dossier No. 6. Paris: UNESCO, 2009. Online at

http://unesdoc.unesco.org/images/0018/001865/186559e.pdf. Page 18, "What is marine spatial planning?"

McCann, J. and S. Schumann with G. Fugate, S. Kennedy, and C. Young. 2013. *The Rhode Island Ocean Special Area Management Plan: Managing Ocean Resources through Coastal and Marine Spatial Planning.* University of Rhode Island Coastal Resources Center/Rhode Island Sea Grant College Program. Online at http://www.crc.uri.edu/download/Practitioner_Guide.pdf. Pages 52-56, "Assessing progress."

Discussion questions

Instructors may wish to pick and choose from among the following discussion topics and prompts.

Part A: Characteristics of Marine Spatial Planning

Accompanying materials: Ehler and Douvere 2009, p. 18.

1. The guide Marine Spatial Planning: A Step-by-Step Approach Toward Ecosystem-Based Management describes six "characteristics of effective marine spatial planning" (listed below). Apply each of these characteristics to the 34th America's Cup case. To what extent was each characteristic illustrated in this case? If it does illustrate a characteristic, in what way? If the case does not illustrate a particular characteristic, do you see this as problematic? What is missing from this case that should have taken place?

    - "Ecosystem-based, balancing ecological, economic and social goals and objectives toward sustainable development;
    - Integrated, across sectors and agencies, and among levels of government;
    - Place-based or area-based;
    - Adaptive, capable of learning from experience;
    - Strategic and anticipatory, focused on the long-term; and
    - Participatory, stakeholders actively involved in the process."

2. In this case, why was (or wasn't) each of these characteristics important? What might have happened if planning did not include any/all of these characteristics?

3. Are there elements of the America's Cup case that strike you as important but that are not reflected in these six key characteristics of marine spatial planning? What are they? Why are they important?

4. In sum, how does the America's Cup case compare to what you have learned about the idea of marine spatial planning based on Ehler and Douvere (2009)? How useful is Ehler and Douvere's list of key characteristics? What does this comparison tell you about the relationship between MSP theory and MSP practice?

Part B: Applying the Integrated Coastal Management Policy Cycle

Accompanying materials: McCann et al. 2013, pp. 52-56.

1. The Integrated Coastal Management Policy Cycle (Olsen 2003; summarized in McCann et al. 2013) is a model that the University of Rhode Island's Coastal Resources Center has long used as a means of guiding and assessing progress in coastal management initiatives. It includes five sequential steps (listed below) describing one integrated marine management process from start to finish. Can you explain each step of the Integrated Coastal Management Policy Cycle model? How do these steps link together, and how/why might the cycle be repeated?
    a. Issue identification and assessment;
    b. Program preparation;
    c. Formal adoption and funding;
    d. Implementation; and
    e. Evaluation.

2. Apply this five-step model to the 34th America's Cup case. What America's Cup activities correspond to each step in the model? Is any step missing or underemphasized in the America's Cup story?

3. In this case, why was (or wasn't) each step of the policy cycle important? What might have happened if planning did not include any/all of these steps?

4. Are there elements of the 34th America's Cup plan development and implementation process that strike you as important but that do not seem to fit in or be explained by the Integrated Coastal Management Policy Cycle? What are they? Why are they important?

5. Overall, how useful is the Integrated Coastal Management Policy Cycle model for framing a marine management initiative like this? If you noticed differences between the policy cycle model and the America's Cup case, what do you make of them? Do they suggest a shortcoming in the America's Cup process or the model itself? What do these differences tell you about the relationship between coastal management theory and practice?

6. Compare the two models used here (the Integrated Coastal Management Policy Cycle and the characteristics of marine spatial planning). How do they differ? Are they two different ways of explaining the same thing, or do they complement each other? Comparing the two, how useful do you find each one for understanding a planning process? Can you envision how you might use one or both of these models if you were working as a coastal management practitioner?

7. Both practitioners and stakeholders interviewed for this case study shared a lesson learned: "don't meet your colleagues and constituents for the first time during a crisis" (see Smythe et al. 2016). What do you think about this? Do you see evidence that the America's Cup case relied on

relationships established before the 'crisis' (in this case, the potential disruption of the America's Cup)? Why do you think this is important? What strategies do you think were used to build these relationships beforehand and to leverage them through the planning process?

Expanding the Discussion

Following are ideas for additional discussion questions, topics, and activities, as well as additional resources that could be used for more in-depth or scholarly analysis of this case study.

Discussion topics and activity suggestions

1. Review one to two articles from the scientific literature which describe MSP foundational concepts and priorities. Examples include but are not limited to Douvere (2008) and Gilliland and Laffoley (2008) listed below. *Evaluate and critique the America's Cup planning process through the lens of the MSP literature*. What do you notice about the differences between theory and practice? Does this literature change how you view the America's Cup process? Does it change how you view the practice of marine spatial planning?

2. The Integrated Coastal Management Policy Cycle is more fully explained in Olsen (2003) listed below. Table 1 in this paper lists a series of actions that are associated with each step of the policy cycle. *Evaluate and critique the America's Cup planning process through the lens of these actions*. Which of these actions seem to have been taken in the America's Cup planning process, and which appear to be missing? Does this framework change how you view the America's Cup process? Does it change how you view the usefulness of the Policy Cycle?

3. Olsen (2003) also describes four "Orders of Outcomes" that identify the changes that define progress toward coastal management goals. First Order outcomes indicate societal commitment toward integrated coastal management and are defined by four indicators: setting of *goals*; establishing *commitment* (in the form of authority); building *constituencies* (stakeholders) and ensuring *capacity* (in the form of funding and institutional resources). Evaluate the America's Cup planning process through this lens. Do you see evidence of these indicators in this case study? Do these indicators change how you view the America's Cup process?

4. The researchers who developed this case study sought to identify lessons learned from this case to be shared with practitioners and stakeholders throughout the world. (Their lessons learned can be found on pp. 43-47 of Smythe et al. 2016.) What are your lessons learned from studying this case? Can you add to or improve upon the researchers' lessons learned?

Additional academic resources

Douvere, F. 2008. The importance of marine spatial planning in advancing ecosystem-based sea use management. *Marine Policy* 32 (5): 762-771.

Gilliland, P. and D. Laffoley. 2008. Key elements and steps in the process of developing ecosystem-based marine spatial planning. *Marine Policy* 32 (5): 787-796.

Halpern, B., J. Diamond, S. Gaines, S. Gelcich, M. Gleason, S. Jennings, S. Lester, A. Mace, L. McCook, K. McLeod, N. Napoli, K. Rawson, J. Rice, A. Rosenberg, M. Ruckelshaus, B. Saier, P. Sandifer, A. Scholz, and A. Zivian. 2012. Near-term priorities for the science, policy and practice of Coastal and Marine Spatial Planning (CMSP). *Marine Policy* 36 (1): 198-205.

Olsen, S. 2003. "Frameworks and indicators for assessing progress in integrated coastal management initiatives." *Ocean & Coastal Management* 46: 347-361.

Olsen, S., E. Olsen and N. Schaefer. 2011. Governance baselines as a basis for adaptive marine spatial planning. *Journal of Coastal Conservation* 15: 313-322.

Additional information on San Francisco Bay America's Cup Planning

Smythe, T., J. McCann, N. Andrescavage and C. Fox. 2016. Spatial Planning for Busy Waterways: A Case Study of Innovative Waterways Management in the San Francisco Bay Region. In McCann, J., Ed. 2016. *Case Studies of Marine Spatial Planning Report Series*. Coastal Resources Center and Rhode Island Sea Grant College Program, URI Graduate School of Oceanography. Narragansett, R.I. 79 pp. A technical report detailing the full case study referenced herein.

Green Fire Productions and University of Rhode Island Coastal Resources Center/Rhode Island Sea Grant. 2015. *Insights From Leaders: Practical Solutions for Ocean Planning* [Video Series]. Online at https://www.openchannels.org/videos/insights. See especially the video of Commander Amy Wirts, U.S. Coast Guard Sector San Francisco.

Smythe, T. and J. McCann. n.d. Lessons from the Practice of Marine Spatial Planning: Findings from Three U.S. Case Studies. Forthcoming; submitted to *Marine Policy* spring 2016. See http://www.crc.uri.edu/initiatives_page/msp/ for further information.

Please review other Coastal Resources Center publications on marine spatial planning at http://www.crc.uri.edu/initiatives_page/msp/

Case Study Narrative

The 34th America's Cup Races in San Francisco Bay: A Case Study of Small-Scale Marine Spatial Planning and Management

I. Overview

In 2015, an in-depth case study was conducted to document the process of planning for and managing the 34th America's Cup races, which took place in San Francisco Bay, California, U.S. in 2012-2013, as a small-scale example of marine spatial planning (MSP). This case study involved in-depth interviews with 15 San Francisco practitioners and stakeholders involved in this MSP process. The following narrative is based on the complete case study report.[1]

Planning for the on-water aspects of the 34th America's Cup Races began in 2010 when San Francisco was selected to host the 2012 - 2013 race series. Oracle Team USA, the American yacht racing syndicate backed by businessman Larry Ellison, was the 2010 Cup winner and selected San Francisco Bay to hold these races in large part because of its strong winds and the visually appealing backdrop of the bay and surrounding region.

The America's Cup is not an ordinary sailboat race. Dating back to 1851, it is arguably the most famous and iconic yacht race in the U.S., and certainly one of the oldest and the most competitive in the international yacht racing community. Moreover, the 34th America's Cup was to be anything but 'your grandmother's America's Cup.' For the first time in the Cup's history, the racing yachts designed for this event, the AC72s, were catamarans (double-hulled boats). These 86-foot carbon fiber vessels were equipped with 131-foot wing sails about the size of a jetliner's wing[2] and could move at speeds up to 40 knots.[3] This would also be the first America's Cup Finals race to take place within the confines of a semi-enclosed waterbody and busy harbor rather than in the open ocean. Managing competitive races between boats like these — as well as the crowds that were expected and the support services required —demanded planning far beyond the norm. Moreover, the America's Cup name and Oracle Team USA came to San Francisco with a big international reputation, financial backing, and a strong sell, arguing that the races would bring as many as 8,840 new jobs and $1.372 billion in economic impact to the City of San Francisco over the two years.[4]

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[1] Smythe, T., J. McCann, N. Andrescavage and C. Fox. 2016. Spatial Planning for Busy Waterways: A Case Study of Innovative Waterways Management in the San Francisco Bay Region. In McCann, J., Ed. 2016. *Case Studies of Marine Spatial Planning Report Series*. Coastal Resources Center and Rhode Island Sea Grant College Program, URI Graduate School of Oceanography. Narragansett, R.I. 79 pp.

[2] National Sailing Hall of Fame. 2015. Science of the 34th America's Cup. Online at http://www.nationalsailinghalloffame.org/index.php?option=com_content&view=category&layout=blog&id=179&Itemid=281. Last accessed March 24, 2016.

[3] United States Coast Guard. 2012. NPRM: Special Local Regulations and Safety Zones: America's Cup Sailing Events, San Francisco, CA (Federal Register Publication). Online at http://www.regulations.gov/#!documentDetail;D=USCG-2011-0551-0001.

[4] Budget and Legislative Analyst, City and County of San Francisco. 2014. "Analysis of the Impact of the 34th America's Cup to the City." San Francisco Board of Supervisors. http://www.sfbos.org/Modules/ShowDocument.aspx?documentid=47894

Planning for and running the 34th America's Cup was a region-wide endeavor spanning land and water. Whereas many activities took place in surrounding areas, this narrative focuses primarily on the on-water aspects of the event, which was led by U.S. Coast Guard Sector San Francisco, working with the Harbor Safety Committee of the San Francisco Bay Region (HSC) and other agencies and stakeholders with clear jurisdiction over or interest in San Francisco on-the-water activities.

II. Background: The Event and the Players

The America's Cup event sponsors initially presented the Coast Guard with a bold proposal for a series of international, high-profile yacht racing events over a two-year period. They proposed to host a series of races in both 2012 and 2013, all inside San Francisco Bay: two America's Cup World Series regattas in August-September 2012, and in 2013, both the America's Cup Challenger Series and the final AC34 Match — a race between the Cup defender and the challenger. This would mean up to 18 race days in 2012 and 83 in 2013, drawing up to 880 spectator vessels on the busiest weekend days.[5] The sponsors also requested the designation of a sizeable racing area which occupied the vast majority of San Francisco Bay as well as the entrance to the bay under the Golden Gate Bridge (see Figure 1). If implemented as proposed, a racing area this size could have effectively closed the entrance to San Francisco Bay to most other maritime traffic for months. The event thus presented the possibility of significant and costly disruptions to both maritime commerce and marine recreation.

The America's Cup required careful planning and effective coordination among the many agencies and stakeholders with jurisdiction over or interest in the bay. At the center of this was U.S. Coast Guard Sector San Francisco, which has jurisdiction over marine events such as the America's Cup as part of the Coast Guard's broad authorities to manage activities on and in the water, and which has extensive experience managing such events. However, the size and complexity of the America's Cup events required the Coast Guard to use extraordinary waterways planning and management tools. While the Coast Guard typically issues Marine Event Permits for yacht racing events, which is a simple routine task performed at the sector level, this event would require the issuance of Special Local Regulations (SLRs) and the establishment of Safety Zones that would define temporary areas, or zones, in which event-related activities such as racing and spectating could take place. These new "field regulations" were subject to the federal rulemaking process, requiring the Coast Guard to issue a formal Notice of Public Rulemaking (NPRM) pursuant to the Administrative Procedures Act[6] and to conduct an Environmental Assessment (EA) pursuant to the National Environmental Policy Act.

Whereas the NEPA and rulemaking processes include specific formal requirements for public participation, Coast Guard Sector San Francisco sought to work side-by-side from the very beginning in close collaboration with those who know the most about San Francisco Bay — its users. This is in keeping with the Coast Guard's long history, in San Francisco and elsewhere, of working collaboratively in commercial ports with other agencies and with maritime stakeholders, or port partners, on planning

[5] U.S. Coast Guard, National Parks Service, U.S. Army Corps of Engineers, and The Presidio Trust. 2012. *Environmental Assessment: 34th America's Cup Races*. Available online at https://www.nps.gov/goga/learn/management/34th-americas-cup-event.htm.
[6] U.S. Coast Guard. 2013. *"Commandant Instruction Manual M16751.3: Permitting of Regattas & Marine Parades."* Available online at http://www.uscg.mil/directives/cim/16000-16999/CIM_16751_3.pdf

for and responding to large events ranging from Fleet Week events to major storms and terrorist attacks. In San Francisco, many interview participants explained that this is simply how the San Francisco maritime community does business. Thus, from Day 1, the Coast Guard worked closely with the local HSC, a longstanding public forum comprising representatives from maritime industry sectors, nonprofit groups, and others dedicated to improving vessel traffic safety in the bay, to plan for the two-year event. Coast Guard Commander Aaron Lubrano explained: "[Starting] a year and a half before the races, we met with all the port partners in the bay area. They have a formal process through the Harbor Safety Committee . . . We took that as the initial starting point . . . and we used that to not circumvent the NEPA process, which has a very formalized communication and public notice [process], but . . . so we could meet with partners through the Harbor Safety Committee and not wait for the NEPA process to catch up."

III. The Process: Developing and Approving the Plan

a. Overview

To facilitate the America's Cup races, the Coast Guard and partners sought to develop spatial management tools and strategies that would enable the racing events to take place while ensuring navigation safety for all users, continuity of maritime commerce and recreational boating, and protection of the bay's natural resources. While there were many management challenges, chief among these were the many different types of maritime traffic that regularly flow through the proposed racing area (see Figure 2). This includes large commercial ships passing under the Golden Gate Bridge, bound to or from one of the seven ports within the San Francisco Bay region; passenger ferries moving commuters throughout the bay and bringing visitors to and from bay islands including Alcatraz; and excursion boats and recreational activities ranging from large sailing and motor yachts to wind surfers and kite boarders. Captain Lynn Korwatch, HSC Chair, explained some of the many concerns:

> "The [America's Cup] … just wanted to run the race, but other things came up that had to be dealt with. With vessel traffic, could the big ships re-route themselves during the race period north of Alcatraz? Because two directions would be going in almost one traffic lane — would that be acceptable to the community? Was it environmental? Was it going to impede ferry traffic, for example? What about those small boat owners who want to get in and out of a marina during race time? Because the area off of the waterfront was originally going to be fully blocked off with no traffic. How would you manage all of the boats anticipated to go out on the water to watch? How do you manage the recreational craft in an area clear of the racecourse? How do you provide security, and will it be stretched too much?"

There were also environmental concerns associated with these on-water activities. One was the potential impacts of a proposed large, floating, gas-powered "jumbotron" viewing screen to be sited in the water along the San Francisco waterfront. Another was the anticipated number of spectator boats. Deb Self of San Francisco Baykeeper explained: "Another concern was protecting San Francisco Bay from additional bacterial pollution. Hundreds of visiting spectator yachts were projected to anchor in San

Francisco Bay throughout the summer. Baykeeper wanted to ensure onboard toilets were locked to prevent discharges to the bay and that mobile pump-out services would be provided."

To address these issues, the planning process sought to identify areas that would be designated for racing, while identifying separate areas for transit zones and other uses, as well as strategies including traffic management considerations to manage these activities. While this planning officially took place through a formal federal regulatory process, the actual data analysis, and stakeholder process included far more than was mandated.

b. Stakeholder Participation

Working through the HSC, the Coast Guard began communicating with stakeholders about the America's Cup races in late 2010, even before San Francisco was announced as the race venue. Then in January 2011, it was formally announced that Coast Guard Sector San Francisco and HSC leaders had met and agreed to utilize the HSC as a forum for communicating with the maritime community about the race. From that point onward, America's Cup updates were provided to HSC members and meeting attendees by both the Coast Guard and America's Cup staff, and by July 2011, the America's Cup had a regular place on HSC meeting agendas. That allowed the Coast Guard to field questions and discuss concerns regarding the event.[7] Meeting content included planning updates, permit application status, and various aspects of race operations, and each briefing was followed by an opportunity for public input and questions on the planning process as it unfolded.[8]

Following these informal dialogues, in October 2011, the Coast Guard worked with the HSC network to host a series of public outreach meetings for six different maritime stakeholder groups: deep draft vessel operators, ferry vessel operators, the recreational boating community, commercial fishing vessel operators, the towing vessel industry, and small passenger vessel operators. The primary purpose of these meetings was to provide stakeholders with the opportunity to offer their input and concerns on the races. At each meeting, stakeholders were briefed on the America's Cup planning process, including an overview of some "notional" racing, transit, and other regulated areas that might ultimately be established through the federal rulemaking process.[9] These meetings also enabled the Coast Guard to better understand how these different groups use the bay and how the America's Cup races could impact these activities.[10] Coast Guard Commander Lubrano explained: "We set up a specific meeting through the Harbor Safety Committee with the harbor pilots . . . We met with the tug boat operators, we met with the ferry operators. There's commuter ferries and there's excursion ferries and other people taking tours of the bay. We didn't get to all of those people through the Harbor Safety Committee, but we got to the major players in the Committee and then got some of the smaller players

[7] U.S. Coast Guard. 2012. "Notice of Proposed Rulemaking and Public Meetings: Special Local Regulations and Safety Zones: America's Cup Sailing Events, San Francisco, CA." *Federal Register* Docket No. USCG-2011-0551. Available online at https://federalregister.gov/a/2012-1907.
[8] Marine Exchange of the San Francisco Bay Region. n.d. "Harbor Safety Committee Minutes." Available online at http://www.sfmx.org/support/hsc/minutes/. Last accessed April 14, 2016.
[9] U.S. Coast Guard. 2011. "Memorandum: Subj: Meeting Minutes for America's Cup Public Outreach to Deepdraft Vessel Operators." Federal Register Docket No. USCG-2011-0551. Available online at https://www.regulations.gov/#!documentDetail;D=USCG-2011-0551-0004.
[10] U.S. Coast Guard 2012.

in the NEPA process. We sat down and told them our initial thoughts, and asked them what their concerns were."

All of the stakeholder engagement described here took place *before* the formal public processes mandated in connection with NEPA and the rulemaking process, which included scoping meetings and public hearings in late 2011 or in 2012. Prior to the formal meetings, the Coast Guard used input received informally through the HSC meetings, through informal contact with members of the HSC network, and at the sector-specific public outreach meetings described above to inform the designation of racing areas and other strategies that were later vetted through the regulatory process.

c. Using Data and Local and Expert Knowledge

In addition to stakeholder consultation, the Coast Guard conducted a good deal of data analysis to inform the development of racing areas, transit zones, and other management areas. To identify the above-mentioned racing areas, the Coast Guard started with the "amoeba" — the large area originally requested by the America's Cup event organizers — and worked to reduce this to an area that would facilitate a safe race event while ensuring the safe passage of other types of ships. They first conducted an in-depth examination of vessel traffic patterns through that part of the bay. This relied most heavily on Automated Identification System (AIS) data, which were disaggregated into vessel types so the Coast Guard could consider the different usage patterns of each maritime user group — passenger ferries, deep draft commercial vessels, and others. Commander Aaron Lubrano explained: "The AIS data was the scientific data I was able to use to qualify what [maritime user groups] really needed." The Coast Guard also utilized other data sources to inform their analysis, including San Francisco Vessel Traffic Service (VTS) radar images of the bay from past large-scale events such as Fleet Week. These images, which reveal areas of recreational boat traffic, provided the Coast Guard with a rough idea of the number of spectators possible for the America's Cup. Also used in this assessment were summary recreational boat counts that had been collected by a contractor during Fleet Week in 2012 for the purpose of informing this analysis. A broad suite of environmental data was also reviewed for inclusion in the Environmental Assessment.

The Coast Guard also drew upon local and expert knowledge to inform their plan. San Francisco VTS operators provided key input in evaluating vessel traffic data and developing possible solutions for maintaining the flow of commercial traffic throughout racing activities. The Coast Guard also solicited input from bay user groups, which was critical both in validating vessel traffic and other data and in shaping an ultimate plan that would accommodate everyone involved. Commander Amy Wirts explained that in many cases it was the unique combination of data and local knowledge that mattered: "Yes, there is a need for data, but you also need local, firsthand knowledge."

IV. The Outcome: Zoning for the Races

The result was a two-part spatial management plan with provisions scaled to the separate 2012 and 2013 race events (see Figures 3 and 4). In both years, the Coast Guard used the SLR process to designate primary regulated areas that were larger than prescribed racing areas. The 2013 regulated area was bigger than the area planned for 2012, in anticipation of the larger AC72 racing vessels, and included a

primary racing area, an inshore area for small craft, and a "transit zone" for vessels such as passenger ferries needing access to piers and facilities along the San Francisco waterfront (see Figure 4). They also designated contingent regulated areas for unlikely weather changes as well as "no loitering" and "no loitering/anchoring" zones surrounding the racing area. Under this plan, primary racing areas were closed to unauthorized vessel traffic between noon and 5 p.m. on race days, with provisions to allow vessels to pass through in some circumstances. This included large commercial ships that would otherwise be bound in or out of San Francisco Bay through this area.

The final areas and associated management provisions were adjusted slightly through the formal rulemaking process in response to public comments, including those of recreational users and representatives of other maritime industries. However, it is important to note that the draft plan put forth for formal public review, including the 2012 and 2013 regulated areas, had already addressed the vast majority of users' concerns about conflicts between the race and other bay activities. "The main feedback through the NEPA process focused on windsurfers and kiteboarders . . . The reason we didn't get a lot of comments from others was because we preempted it by interacting with all the other players," explained Commander Lubrano.

a. Planning for Implementation: The Vessel Traffic Management Plan

While the final approved management areas were considerably smaller than the original "amoeba" proposed by the America's Cup team and had been shaped through a comprehensive data analysis and stakeholder process, the race was still expected to impact commercial traffic in the bay. This was particularly true for 2013 when the primary regulated area overlapped with both the eastbound and westbound San Francisco Bay shipping lanes. Given this, after completing the necessary planning and regulatory processes to establish the SLRs and Safety Zones, the Coast Guard also worked with stakeholders to develop a Vessel Traffic Management Plan to facilitate the safe and efficient movement of traffic around the races. While this traffic management plan was not required, it was deemed important in order to accommodate the races and other uses of the bay.

The Coast Guard conducted a stakeholder process to develop the traffic management plan. This included informal meetings with specific industry segments and a comprehensive tabletop exercise (a simulation of an actual traffic management scenario). Commander Amy Wirts explained: "Developing the operational traffic management plan involved individually engaging all of the same players to bounce ideas off of them informally. Then we brought everyone together in one room, representatives from the tugs, the ferries, deep draft vessels, the bar pilots to conduct a tabletop exercise. That tabletop really let us game out scenarios: what is it going to look like if we have the busiest day imaginable in terms of commercial traffic while the races are going on, and visibility gets limited and we have other smaller regattas going on in other parts of the bay. Doing that — having smaller targeted discussions and a tabletop with all of the right players at the table — is what allowed us to come up with a very manageable traffic management plan to accommodate both the races and all other waterway uses."

The traffic management plan established provisions for managing commercial traffic both within and outside of the regulated area. Traffic passing outside of the regulated area was managed by San

Francisco VTS, which coordinated the movement of large commercial ships and implemented other management provisions to facilitate the safe flow of traffic around the event. Traffic passing through the regulated area, i.e., through the transit zone or the racing area, was coordinated through an inter-organizational team posted on the water aboard the America's Cup race committee boat. This Coast Guard-led team included America's Cup and San Francisco VTS staff and was assembled to facilitate the best possible coordination between the race and other bay activities. In practice, the traffic management plan involved re-routing a great deal of traffic — deep draft vessels, ferries, and tug and barge traffic — during race periods while minimizing schedule impacts for these commercial vessels.

Additionally, the traffic management plan included provisions for regular port-wide coordination planning calls the evening before each race day. These inter-organizational calls included Coast Guard, San Francisco VTS, and America's Cup staff as well as representatives of key bay user groups such as the San Francisco Bay Pilots and the HSC's tug and ferry working groups. These calls were designed to identify and proactively mitigate potential vessel traffic conflicts before they took place, by consulting with the pilots about inbound/outbound commercial traffic and determining how best to route vessels through the bay. Commander Amy Wirts explained that the calls "allowed for advanced planning" and that "it could be as easy as saying we're not going to get this container ship underway from Anchorage 9 until 20 minutes after we planned to, so that this other ship has time to pass through the central bay before we meet them."

V. Implementation and Adaptive Management: Running the Races in 2012 and 2013

America's Cup races took place in 2012 and 2013 as scheduled, managed through the spatial management plan and traffic management measures described above. While some racing activities changed, racing ultimately took place in the middle of San Francisco Bay on 80 different days over the two years. All interview participants involved in operationalizing this plan — including those who participated in the on-the-water teams and in the evening calls — spoke about the effectiveness of the plan and implementation mechanisms.

However, as with all management plans, the Coast Guard's final plan for managing the 2012 and 2013 races required a form of adaptive management. One such adaptation began during a practice session in May 2013, when one of the AC72s capsized and crew member Andrew Simpson drowned. This tragic accident followed an earlier incident in 2012 when another team capsized their AC72. This earlier accident had not resulted in the loss of life or serious injury, but it did result in the complete loss of the capsized vessel. The 2013 accident made it evident that the AC72s (which were not raced in 2012) were much faster than initially projected and considered during the planning and permitting process.

Whereas this 2013 incident took place during an unregulated practice session and thus was not officially part of the permitted event, this accident, coupled with the preceding one, led the Coast Guard and partners to re-evaluate plans and operational procedures for managing the races. In re-examining the regulated area, the Coast Guard considered whether the racing area should be expanded to better accommodate the AC72s. To do this, they reignited discussions with HSC members and other stakeholders to gain additional input. They also re-examined AIS data and worked with VTS staff and

maritime stakeholders to determine the potential impact on marine traffic if the racing area's boundary were slightly expanded. Through this process, the Coast Guard ultimately issued a relatively minor modification to the SLR in preparation for the 2013 races.

Figure 1. Original Proposed Race Area, Dubbed "The Amoeba" (Source: U.S. Coast Guard et al., 2012)

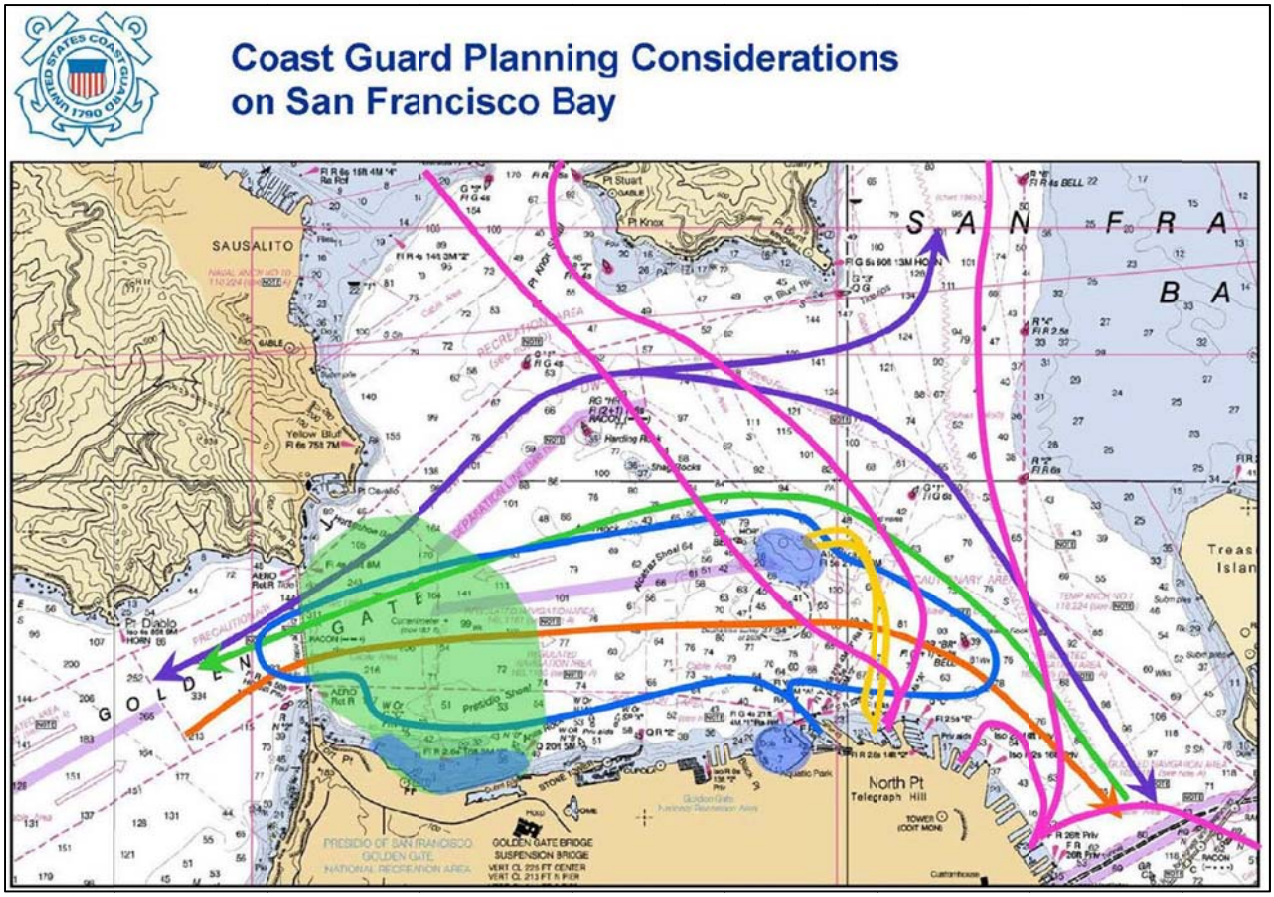


Figure 2. San Francisco Bay Vessel Traffic Patterns and Other Planning Considerations (Source: U.S. Coast Guard Sector San Francisco)

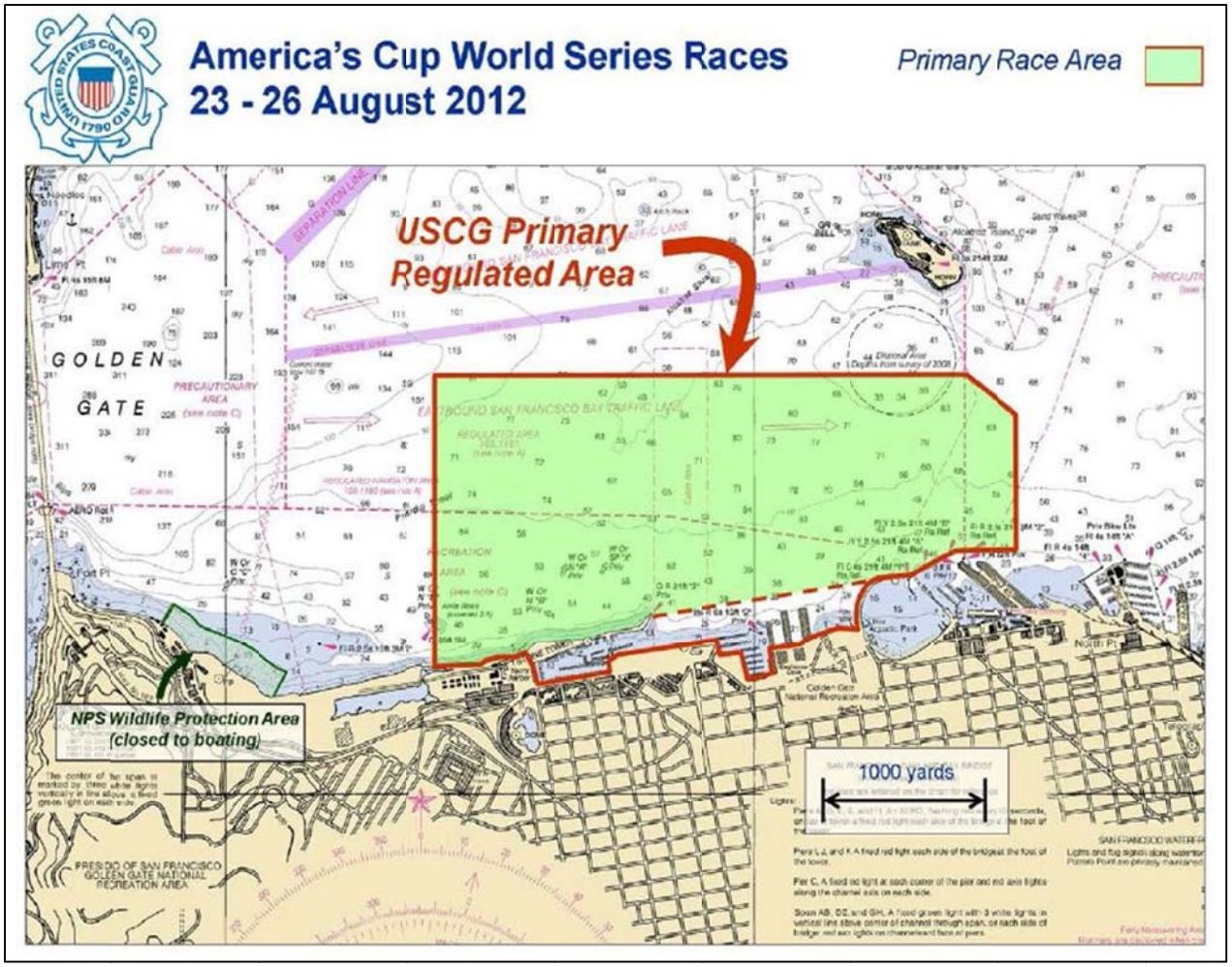
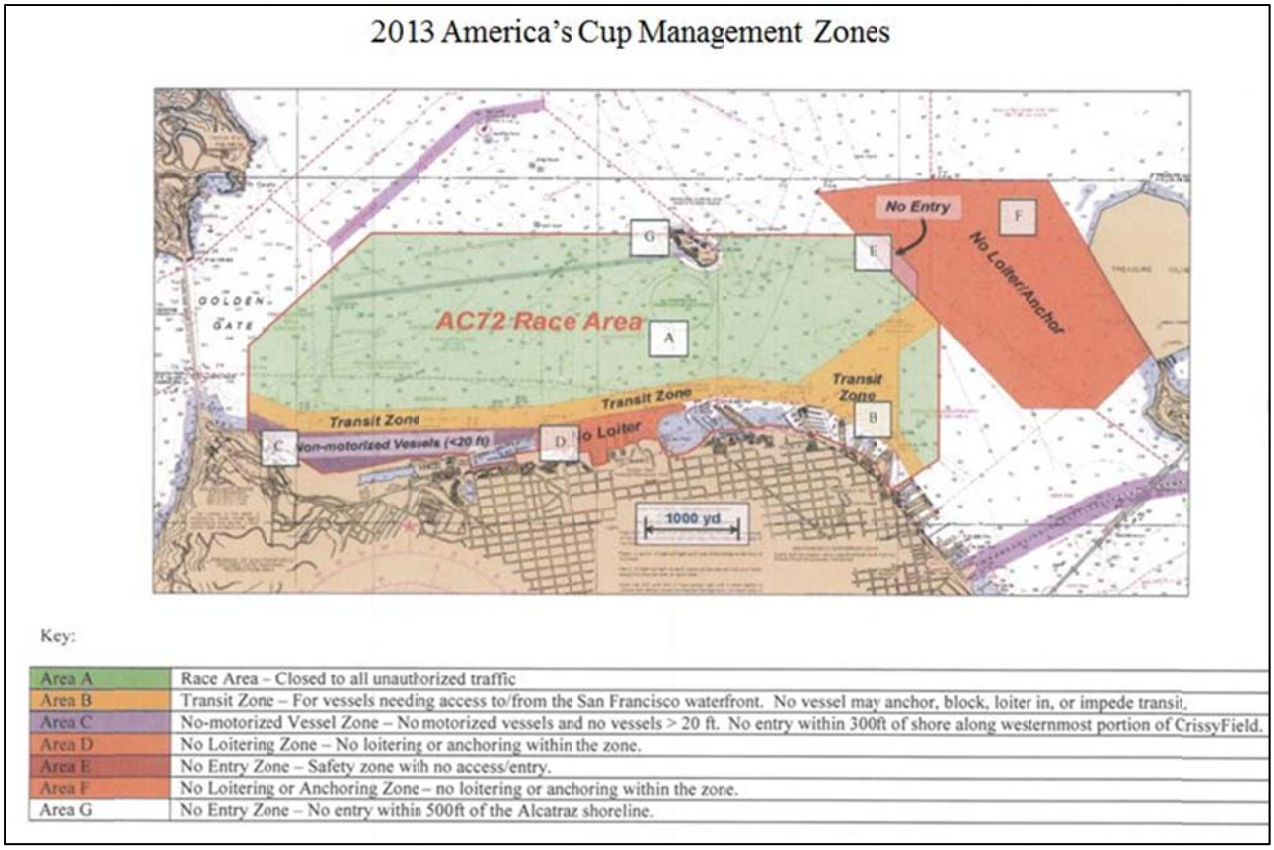


Figure 3. Final 2012 Primary Regulated Area (Source: U.S. Coast Guard Sector San Francisco)



Key:

Area A	Race Area – Closed to all unauthorized traffic
Area B	Transit Zone – For vessels needing access to/from the San Francisco waterfront. No vessel may anchor, block, loiter in, or impede transit.
Area C	No-motorized Vessel Zone – No motorized vessels and no vessels > 20 ft. No entry within 300ft of shore along westernmost portion of CrissyField.
Area D	No Loitering Zone – No loitering or anchoring within the zone.
Area E	No Entry Zone – Safety zone with no access/entry.
Area F	No Loitering or Anchoring Zone – no loitering or anchoring within the zone.
Area G	No Entry Zone – No entry within 500ft of the Alcatraz shoreline.

Figure 4. Final 2013 Race Area and Other Management Zones (Source: U.S. Coast Guard Sector San Francisco)

Drivers, Goals and Objectives in Coastal and Ocean Management: A Case Study of Washington Coast Marine Spatial Planning, 2010-2015

Goal

Students will use the case of U.S. Washington State Pacific Coast Marine Spatial Planning (MSP), as it has evolved between 2010 and 2015, to understand and analyze the role that planning drivers, goals, and objectives play in shaping an MSP or coastal management initiative.

Learning objectives

Through reading and discussing this case study, students will:

1. **Understand** the role that planning drivers — pressing issues or problems that lead to or inform planning — can play in shaping an MSP or coastal/ocean management initiative.
2. **Identify and critically evaluate** multiple drivers, and their changing role and influence, in shaping the Washington Coast MSP process.
3. **Analyze and critically evaluate** the goals and objectives that were developed to shape the Washington Coast MSP process and their relationship to planning drivers.
4. **Critically evaluate** the process used to develop the Washington Coast MSP goals and objectives with stakeholder input.

Educational level

Undergraduate upper division; graduate school

Keywords

marine spatial planning; coastal management; ocean management; use conflicts; public participation; stakeholder engagement; public policy process; planning drivers; goals and objectives; goal-setting

Teaching This Case Study

This case study has been developed for students who have been introduced to coastal and ocean management concepts and tools; the concept and some examples of marine spatial planning; and basic tenets of planning and the public policy process. When teaching this case, we recommend using select accompanying materials (listed below) to provide students some broader context on the Washington Coast MSP process as well as the elements of planning. If you wish to delve more deeply into this case, see “Expanding the Discussion” (below) for other suggestions of discussion questions and resources.

Accompanying materials

Ehler, B. and F. Douvere. 2009. *Marine Spatial Planning: A Step by Step Approach toward Ecosystem-Based Management.* Intergovernmental Oceanographic Commission and Man and the Biosphere Programme. IOC Manual and Guides No. 53, ICAM Dossier No. 6. Paris: UNESCO, 2009. Online at http://unesdoc.unesco.org/images/0018/001865/186559e.pdf. Pages 41-42, Defining Goals and Objectives.

McCann , J., S. Schumann, G. Fugate, S. Kennedy, and C. Young. 2013. *The Rhode Island Ocean Special Area Management Plan: Managing Ocean Resources through Coastal and Marine Spatial Planning.* A Practitioner's Guide. Online at http://www.crc.uri.edu/download/Practitioner_Guide.pdf. Pages 53-56, Assessing Progress.

Pacific Coast Marine Resource Committees. 2013. *Coastal Voices: A report on citizen priorities, interests, and expectations for marine spatial planning along Washington's Pacific Coast*. Online at http://www.msp.wa.gov/wp-content/uploads/2013/06/060413_Coastal-Voices-Version-Final.pdf. Page 4, Protecting Existing Uses.

Washington Department of Ecology. 2014. Marine Spatial Plan for Washington's Pacific Coast: Summary of SEPA Scoping and Response to Comments. Online at http://www.msp.wa.gov/wp-content/uploads/2014/01/MSP_scoping_summary_2014.pdf. Pages 6-7, Goals and Objectives.

Discussion questions

1. What was Washington's original planning driver for marine spatial planning? Discuss this driver and how and why this driver led to the MSP process. What was it about this driver that engaged diverse stakeholders and built political will?

2. Washington's original driver did not come to fruition, but a second driver has kept the planning process going. Discuss this second driver — how does it differ from the first in terms of its ability to engage diverse stakeholders and build political will?

3. Analyze the role of these drivers more broadly. What role do you think planning drivers have in influencing MSP and coastal management initiatives? What role do drivers have in initiating and sustaining stakeholder engagement?

4. Imagine that you are advising planning staff who are leading an MSP process, and they do not have a powerful planning driver or an issue that "stirs the blood" of plan stakeholders. What would you tell them to do? Brainstorm one or more creative or innovative solutions for planners who find themselves in this situation.

5. Analyze the substance of the Washington Coast marine spatial plan goals and objectives. What topics, problems or issues appear to be prioritized? How do these goals and objectives relate or respond to the planning drivers discussed above? How do they relate to the mandate of Washington's 2010 MSP law?

6. Analyze the process of engaging stakeholders in the development and refinement of Washington's goals and objectives. How were stakeholders involved in developing the goals and objectives? How could this process be modified or improved upon in future planning efforts?

7. Analyze these planning goals and objectives more broadly. To what extent are these goals and objectives responding to (a) specific issues or problems or (b) broader topics? To what extent do they reflect stakeholders' issues and concerns? To what extent will planners be able to measure and track progress toward these goals and objectives?

Expanding the Discussion

Following are ideas for additional discussion questions, topics, and activities and additional resources that could be used for more in-depth or scholarly analysis of this case study.

Discussion questions

1. This educational case study was finalized in early 2016. Check on the current status of the Washington Coast marine spatial planning process by viewing the project website http://www.msp.wa.gov or by conducting a general Google search. What has happened since early 2016? Have planning drivers, goals and objectives changed? If so, how and why?

2. Review the guidance provided on developing goals and objectives in Ehler and Douvere 2009 (listed above). Then, evaluate the Washington goals and objectives through this lens. To what extent do they meet the characteristics of good "SMART" objectives (p. 41)? If they do not meet these objectives, do you think that matters? What is your evaluation of the guidance provided by Ehler and Douvere? Imagine you are a practitioner - to what extent do you find this guidance useful and realistic?

3. In their review of 16 MSP initiatives, Collie et al. (2013, listed below) found that some plans responded to objectives mandated by legal instruments. Others responded to objectives identified through the planning process. They also found that planning objectives can be understood across a range from conceptual on one end to operational on the other hand. Review the Collie paper, and then consider Washington's goals and objectives through this lens. How were Washington's goals and objectives identified, and where are they on the Collie et al. continuum of planning objectives?

4. Some argue that a marine spatial plan should be ecosystem-based and should not focus on or respond to any one particular planning driver. However, others argue that a driver is necessary for generating the necessary funding and political will to initiate planning. Discuss this conundrum. What do you think about this? How does this apply to the Washington case study?

5. The researchers who developed this case study sought to identify lessons learned from this case to be shared with practitioners and stakeholders throughout the world. (Their lessons learned can be found on pp. 31-33 of Trosin et al. 2016.) What are your lessons learned from studying this case? Can you add to or improve upon the researchers' lessons learned?

Additional academic resources

Collie, J., W. Adamowicz, M. Beck, B. Craig, T. Essington, D. Fluharty, J. Rice and J. Sanchirico. 2013. Marine spatial planning in practice. *Estuarine, Coastal and Shelf Science* 117: 1-11.

Olsen, S. 2003. "Frameworks and indicators for assessing progress in integrated coastal management initiatives." *Ocean & Coastal Management* 46: 347-361.

Additional information on the Washington Coast MSP Process:

Trosin, B., T. Smythe, N. Andrescavage and C. Fox. 2016. A Case Study of the Washington Coast Marine Spatial Planning Process, 2010-2015. In McCann, J., Ed. 2016. *Case Studies of Marine Spatial Planning Report Series*. Coastal Resources Center and Rhode Island Sea Grant College Program, URI Graduate School of Oceanography. A technical report detailing the full case study referenced herein.

For more information on the Washington Coast MSP Process, see www.msp.wa.gov

Case Study Narrative

Drivers, Goals and Objectives in Coastal and Ocean Management: A Case Study of Washington Coast Marine Spatial Planning, 2010-2015

I. Overview

The U.S. Washington State Pacific coast has a long history of its people making a living from its natural resources. Home to four coastal Treaty Tribes as well as communities that make a living from fishing, tourism and logging, the people from this region have traditionally played a leadership role in the management of their coasts and offshore waters in partnership with state and federal government. Using tools that include community-developed shoreline management plans, national and state marine conservation areas, and formal agreements between government (including Tribes) and user groups, the people of this region have worked to protect the natural resources upon which they so greatly depend, while managing increased human activities. The most recent coastal management tool brought to this region is marine spatial planning (MSP). In Washington, the MSP process, still underway at the time of this writing, is grounded in a 2010 state law that required the creation of regional non-regulatory marine spatial plans.[1] Spearheaded by state Sen. Kevin Ranker, this law was established with support from local individuals concerned about the impact that offshore renewable energy would have on their fishing and other activities.

Washington's MSP process is being led by the Washington Department of Ecology, which houses the state's coastal management program, in partnership with multiple other state agencies. The first area for which a marine spatial plan is being completed is the Washington Pacific Coast region (see Figure 1). This process officially began in 2010, though funding was not allocated until 2012. At the time of this writing, the process is currently in Stage 3, "Developing the Plan" (see Figure 2), and is expected to conclude in late 2016. In 2015, a case study analysis was conducted of the Washington Coast MSP process to date. This research included 15 interviews with individuals representing MSP planning staff, industry experts and local community leaders. The narrative that follows is based upon that case study; please see Trosin et al. 2016 for the complete case.[2]

II. Drivers for Marine Spatial Planning

While the Washington Coast MSP process is guided by a 2010 state law, drivers that led to a call for marine spatial planning predate the law by nearly a decade. In 2002, AquaEnergy (later purchased by Finavera Renewables), a renewable energy company, submitted a Declaration of Intent to the Federal Energy Regulatory Commission (FERC), asking whether or not their renewable energy pilot project off the Pacific coast of Washington State would require a license. FERC replied that it would.[3] This proposal,

[1] Washington State Legislature, "RCW 43.372.005," 2013.
[2] Trosin, B., T. Smythe, N. Andrescavage and C. Fox. 2016. A Case Study of the Washington Coast Marine Spatial Planning Process, 2010-2015. In McCann, J., Ed. 2016. *Case Studies of Marine Spatial Planning Report Series*. Coastal Resources Center and Rhode Island Sea Grant College Program, URI Graduate School of Oceanography.
[3] Federal Energy Regulatory Commission. 2015. "Hydrokinetic Projects." Online at http://www.ferc.gov/industries/hydropower/gen-info/licensing/hydrokinetics.asp#timeline. Last accessed March 30, 2016.

involving wave buoys off the Makah reservation, was designed to develop a local source of energy for the Tribe. AquaEnergy received a license from FERC in 2007[4] but surrendered the license in 2009 citing "an unfavorable economic climate and restrictions on capital necessary to continue project development."[5] Thus, this project did not come to fruition.

In 2007, a local investor also started a company called Grays Harbor Ocean Energy and developed a proposal to place a renewable energy facility off the Washington coast in the heart of prime crabbing ground. This project also did not come to fruition. However, interview participants explained how this project, when first proposed, created tension among local communities who were worried about the impacts on existing uses and the environment, as well as the absence of a proactive plan to address how and where this new use should occur.

Following these renewable energy proposals and discussions, Sen. Ranker began championing marine spatial planning as a way to strategically plan for these and other new uses and protect existing uses. Local stakeholders met with their local representatives and helped outline the key components of the Washington MSP law. Interview participants reported how many of these stakeholders saw marine spatial planning as a way to prevent displacement and protect existing sustainable uses from new uses.

In 2010, due in part to Sen. Ranker's leadership, the Washington State legislature enacted a law that acknowledged the challenge of offshore renewable energy: "These multiple uses as well as new emerging uses, such as renewable ocean energy, constitute a management challenge for sustaining resources and coordinating state decision-making in a proactive, comprehensive and ecosystem-based manner."[6] The content of this law is further discussed below. Dale Beasley, a crab fisherman and President of the Columbia River Crab Fishermen's Association, described this series of events that led to the writing of the MSP law:

> "In 2010, we had Senator Ranker from San Juan Island have this vision of what he thought we should do with MSP, and he's a pragmatist in the legislature; he understood that if he didn't come to the coast and get the coastal legislators on board, it wasn't going to happen. So, they had the first coastal MSP meeting in Aberdeen and our coastal legislators were all there, and there were probably ten of us from the fishing community, no one else was there. And we sat down with those legislators to draft the first piece of MSP, and the reason we did that was because Burt Hamner of Grays Harbor Ocean Energy had just put his vision of what the ocean should look like in twenty to thirty years. And that was enough ocean energy devices on the coast between Westport and the Columbia River to lower the wave climate by eleven percent . . . There'd be no room for anything else in the ocean. [It would] be 100 percent ocean energy. And our legislators said absolutely that is not the vision for this state."

Around the same time, the concept of marine spatial planning was gaining traction at the federal level. In 2010, President Obama issued Executive Order 13547 which established the National Ocean Policy

[4] Federal Energy Regulatory Commission, 2015.
[5] Hydroworld.com., 2009. "Finavera abandons 1-MW Makah Bay, 100-MW Humboldt wave projects." February 11, 2009. Online at http://www.hydroworld.com/articles/2009/02/finavera-abandons-1-mw-makah-bay-100-mw-humboldt-wave-projects.html.
[6] Washington State Legislature, "RCW 43.372.005(1)(b)," 2013.

with nine strategic priorities and called on federal agencies to coordinate to implement these priorities through a new National Ocean Council.[7] One of these priorities was the development of regional Coastal and Marine Spatial Plans. The associated guidance documents[8] called for these plans to be developed for large marine ecosystems, with the option for some planning efforts to be divided into plans for smaller sub-regions. The West Coast planning region covers the California Current Large Marine Ecosystem within the U.S. Exclusive Economic Zone, which encompasses offshore areas of Washington, Oregon, and California. In addition, the guidance documents acknowledged the role of state plans to serve as a building block for larger regional planning efforts.[9] These federal actions brought with them the hope that federal funding and support would be provided to develop state marine spatial plans. Because of this, state leaders saw a state-led MSP process as a way to favorably position Washington to engage in and influence future broader regional planning efforts.

III. Washington's MSP Law

The law that was spearheaded by Sen. Ranker (RCW 43.372), officially named "Marine Waters Planning and Management," defines marine spatial planning as "a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives. Often this type of planning is done to reduce conflicts among uses, to reduce environmental impacts, to facilitate compatible uses, to align management decisions, and to meet other objectives determined by the planning process."[10] The law's stated purposes are to build upon existing efforts by augmenting their marine spatial components, improve coordination among state agencies in marine management, and establish policies to guide state and local agencies in exercising jurisdiction over proposed uses and activities in marine waters.[11]

The law then called for the coordinated development of a "comprehensive marine management plan" that must recognize existing uses and tribal treaty rights; promote protection and restoration of ecosystem processes; address potential impacts of climate change and sea level rise; foster and encourage sustainable uses; preserve and enhance public access; protect and encourage working waterfronts and support associated infrastructure; foster public participation in decision-making; and integrate and make recommendations for aligning existing plans and authorities.[12] Finally, it stipulates that all state agencies with marine waters planning and management responsibilities are authorized to include marine spatial data and MSP elements into their existing plans and ongoing planning; establishes a "marine interagency team" to lead this work; and permits the state to conduct marine spatial planning in distinct geographic sub-regions such as the Pacific Coast.

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[7] Executive Order 13547, *Stewardship of the Ocean, Our Coasts, and the Great Lakes*.
[8] White House Council on Environmental Quality. 2010. *Final Recommendations of the Interagency Ocean Policy Task Force.* July 19, 2010. Online at https://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf; National Ocean Council. 2013. National Ocean Policy Implementation Plan. Online at https://www.whitehouse.gov/sites/default/files/national_ocean_policy_implementation_plan.pdf.
[9] White House Council on Environmental Quality, 2010; National Ocean Council, 2013.
[10] Washington State Legislature, "RCW 43.372.060(6)(c)," 2013.
[11] Washington State Legislature, "RCW 43.372.005(2)-(3)," 2013.
[12] Washington State Legislature, "RCW 43.372.040(4)," 2013.

While the law addresses offshore renewable energy considerations, the scope of planning called for by the law is not limited to this new use. The law identifies "renewable ocean energy" as a new, emerging use and calls for a series of maps that summarize available data on "appropriate locations with high potential for renewable energy production" with minimal potential conflicts with existing uses or the natural environment, as well as a framework for coordinating review of proposed renewable energy development uses.[13] However this is only a small subset of what the law requires; other plan elements will include maps summarizing data on the full range of ecological characteristics and human uses of the planning area, as well as an ecosystem assessment of Washington's marine waters.

IV. Washington Coast MSP Stakeholder Engagement

Since the beginning of Washington's MSP process, the planning team has worked to foster public participation in the process — both because it is required by the state MSP law and because this is typically considered a best practice in marine spatial planning and in coastal management. For Washington Coast's MSP effort to date, the Washington Coastal Marine Advisory Council (WCMAC), established in December 2011, has served as a primary forum for discussions between state agencies and diverse stakeholder representatives. The WCMAC provides an opportunity for stakeholder representatives to provide advice to the state agencies on ocean policy and provides an opportunity for discussions between various stakeholder representatives. In the MSP process, WCMAC meetings provide a space for discussion, clarification, and voicing concerns from both state agencies and stakeholder representatives.[14]

The WCMAC's structure has changed throughout the course of the MSP process. During the first half of the pre-planning phase in 2012, the WCMAC was operating under the Washington Department of Ecology and included representatives from various interest groups, industry, and the Marine Resource Committees (MRCs), which are local, science-based community-based groups that promote marine resource stewardship and restoration. In the fall of 2013, legislation prompted the transition of the WCMAC into the Governor's office with some new members, including voting seats for each of the state agencies that had not been on the original council. Current membership thus comprises both stakeholders representing a broad range of sectors and interests and state agency representatives.

To date, regular meetings of the WCMAC have been the primary means of formally engaging stakeholders and, to a limited extent, have allowed for some public comment. WCMAC meetings take place four to five times a year and have included presentations on process and content; status reports; structured discussions on topics like the marine spatial plan development process, upcoming actions and specific studies; and updates on matters like budgets and timelines.[15]

[13] Washington State Legislature, RCW 43.372.040(6)(c), 2013.
[14] Washington Department of Ecology. 2015. "Washington Coastal Marine Advisory Council." Online at http://www.ecy.wa.gov/programs/sea/ocean/advisorycouncil.html. Last accessed March 30, 2016.
[15] Washington Department of Ecology, 2015.

V. Washington Coast MSP Goals and Objectives

During Phase II, the "Understanding Impacts" stage of the Washington Coast MSP process, Washington planners engaged stakeholders, agencies and tribal governments in a broad public scoping process. This process included both WCMAC members and others and was not limited to regular WCMAC meetings. It included a series of public workshops, community outreach presentations, and conversations with community organizations up and down the coast. The language of the planning goals and objectives, as well as the final boundary for the marine spatial plan, was developed and finalized through this process.

The process of developing planning goals and objectives began in 2013. With funding and guidance from the state agencies, The Nature Conservancy and Surfrider Foundation hosted local, community-based workshops with each of the longstanding coastal counties' MRCs. These local workshops were intended to maximize the in-depth participation and involvement of coastal county citizens, who arguably would be more directly affected by the MSP process. They were designed to prepare the MRC members and local industry representatives for the state-led, goal-setting workshops where they would represent their county or industry interests. These workshops resulted in a workshop report, *Coastal Voices*, which synthesizes stakeholders' ideas and concerns regarding the marine spatial plan.[16]

In addition to these MRC workshops, local government, state and federal agencies, Tribes, and the WCMAC came together for a series of three separate, daylong workshops to develop the goals and objectives of the Washington Coast marine spatial plan (see Table 1). These goal-setting workshops built upon the local MRC workshops in many ways; for example, the MRC and industry representatives who had participated in the *Coastal Voices* workshops (above) were also involved in these workshops. During these workshops, stakeholder, agency, and tribal government representatives worked together to develop draft goals and objectives. The workshop series began with a visioning exercise. It then involved workshop participants in drafting, responding to, and editing the goals and objectives with assistance from Washington Sea Grant workshop facilitators, National Oceanic and Atmospheric Administration (NOAA) trainers, state agency staff, and graduate students from the University of Washington. These draft goals and objectives, which were released for public comment, reflected the consensus and compromise of stakeholder, agency and tribal workshop participants.

Study interview participants explained how, during both the community-level workshops hosted by Surfrider and The Nature Conservancy and the larger workshops with local, state, federal and tribal governments, industry representatives and MRC members, many local participants repeatedly brought up one phrase which they felt represented their goals for their own coastal communities: "*Protect and preserve existing sustainable uses*." Some commented that this language, which echoed considerations included in the 2010 MSP law, became the mantra of industry and MRC members on the coast. Whereas some participants actively advocated for including this language during the goal- and objective-setting workshops, the exact phrasing was not included in the proposed draft goals and objectives released for public comment as not all participants agreed on its importance. During the public comment process,

[16] Pacific Coast Marine Resource Committees. 2013. *Coastal Voices: A report on citizen priorities, interests, and expectations for marine spatial planning along Washington's Pacific Coast*. Online at http://www.msp.wa.gov/wp-content/uploads/2013/06/060413_Coastal-Voices-Version-Final.pdf.

many stakeholders expressed concern and dissatisfaction about the exclusion of this language. Some expressed their concern that the state agencies were not listening to local community concerns. Ultimately, after extensive dialogue between local stakeholders and state agencies, these exact words were integrated into the official goals and objectives of the Washington State marine spatial plan.[17] Subsequently, the WCMAC, MRCs, and Washington State government agencies worked together to draft and recommend a list of actions to help refine the goals and objectives.[18]

Planners interviewed for this study explained that a key challenge in the goal- and objective-setting process was to manage participants' expectations of what could be accomplished through the MSP process. They explained that the 2010 MSP law shapes what must be addressed in the plan and what can realistically be accomplished by the plan, given that it will be a nonregulatory document implemented through the existing management framework. They further explained that the goal- and objective-setting process needed to consider all input, including that of local communities and industry as well as agency and tribal government concerns.

Table 1. Washington Coast MSP Revised Goals and Objectives (Washington Dept. of Ecology 2014)

Overarching Goal: To ensure a resilient and healthy marine ecosystem on Washington's coast that supports sustainable economic, recreational, and cultural opportunities for coastal communities, visitors and future generations.	
Goals	**Objectives**
Goal 1: Protect and preserve healthy existing sustainable uses to ensure economic vibrancy and resource access for coastal communities.	**Objective 1**: Protect and preserve healthy existing natural resource-based economic activity on the Washington Coast.
Goal 2: Maintain maritime coastal communities from now into perpetuity.	**Objective 2:** Sustain diverse traditional uses and experiences to ensure continuity of WA's coastal identity, culture and high quality of life.
Goal 3: Ensure that our marine ecosystem is preserved for future generations.	**Objective 3:** Foster healthy and resilient marine ecosystem functions, biodiversity and habitats.
Goal 4: Develop an integrated decision-making process which supports proactive, adaptive and efficient spatial planning.	**Objective 4:** Develop a locally supported and collaborative process that is coordinated with existing authorities for aligning management decisions.
Goal 5: Encourage economic development that recognizes the aspirations of local communities and protects coastal resources.	**Objective 5:** Enhance sustainable economic opportunities to achieve a resilient economy and improved quality of life.

[17] Washington Department of Ecology. 2014. *Marine Spatial Plan for Washington's Pacific Coast: Summary of SEPA Scoping and Response to Comments.* Online at http://www.msp.wa.gov/wp-content/uploads/2014/01/MSP_scoping_summary_2014.pdf.
[18] Washington Department of Ecology, 2014.

VI. Stakeholder Concerns

Case study interviews revealed that one of the stakeholders' primary concerns has been, and continues to be, that existing uses will be displaced as a result of new uses including, but not limited to, renewable energy. It is this concern that led to the change in the plan's goals and objectives, as discussed above. The existing uses of fishing and shellfish aquaculture are a strong part of Washington's coastal culture and economy. These uses largely contribute to how these communities define themselves — both their history and future. These communities have also struggled with the loss of economic opportunity.

Stakeholder advocacy for the phrase "protect and preserve existing, sustainable uses" was grounded in this, and some stakeholders continue to use this language when describing the primary benefit they hope to gain from participating in the MSP process. WCMAC member Brian Sheldon explained: "I mean great, you've got a wind turbine out there, how are you going to get it [the electricity] to shore, and what it is going to displace? When I see maps like that, where you've basically displaced fishing, we don't have a lot of fishing ground around here to displace anymore."

Planners indicate that, at the time of this writing, with the planning process nearing completion, some stakeholders remain concerned that the plan will not adequately protect and preserve existing sustainable uses despite the inclusion of this language as a plan goal. Because plan recommendations are still under development, including those related to space (e.g., areas to avoid, areas of preferred uses) that could respond to this goal, this remains a topic of active discussion. Planners relay that some stakeholder dissatisfaction is likely due to different interpretations of what this goal means in practice as well as different expectations of what a non-regulatory plan can realistically accomplish through existing authorities. They further indicate that some stakeholders had probably hoped to see the plan solve some problems that are not within the scope of MSP law. Planners describe that they have continually worked to manage expectations about the final plan and have let stakeholders know that their continued participation in the process allows their concerns to be reflected in plan recommendations provided through the WCMAC.

VII. Progress to Date in Achieving Goals and Objectives

At the time of this writing, the Washington Coast marine spatial plan is still being developed and it is not yet clear what the final plan might look like or what types of outcomes or recommendations it might include. However, significant progress has been made to date. For Goal 1 (economy/ocean uses), planners have analyzed existing marine activities and their economic contributions and have identified and assessed indicators of economic health; stakeholder engagement and identification of existing relevant laws is ongoing. For Goal 2 (maritime culture), assessment of social well-being is completed; efforts to understand culturally important uses and document vulnerabilities to hazards are ongoing; and efforts to protect aesthetics are under development. For Goal 3 (marine ecosystem), efforts to identify ecologically important areas and to assess ecosystem health are completed; efforts to understand natural resources and ecosystem processes and human impacts on nature are ongoing; and an effort to minimize adverse environmental impacts is under development. For Goal 4 (management framework), efforts to gather information on climate change, engage stakeholders and facilitate public

participation, engage scientists, and use the best available science are ongoing; efforts to describe the management framework, share information across state lines, and improve efficiency are under development. For Goal 5 (economic development/new ocean uses), efforts to understand potential new uses and analyze data are ongoing and efforts to develop recommendations and mitigation measures are under development.[19] For further information on progress to date, please see http://www.msp.wa.gov.

[19] Washington Department of Ecology. 2015. "Progress Report, updated 11/23/2015." Online at http://www.msp.wa.gov/msp-projects/progress-report/. Last accessed March 30, 2016.

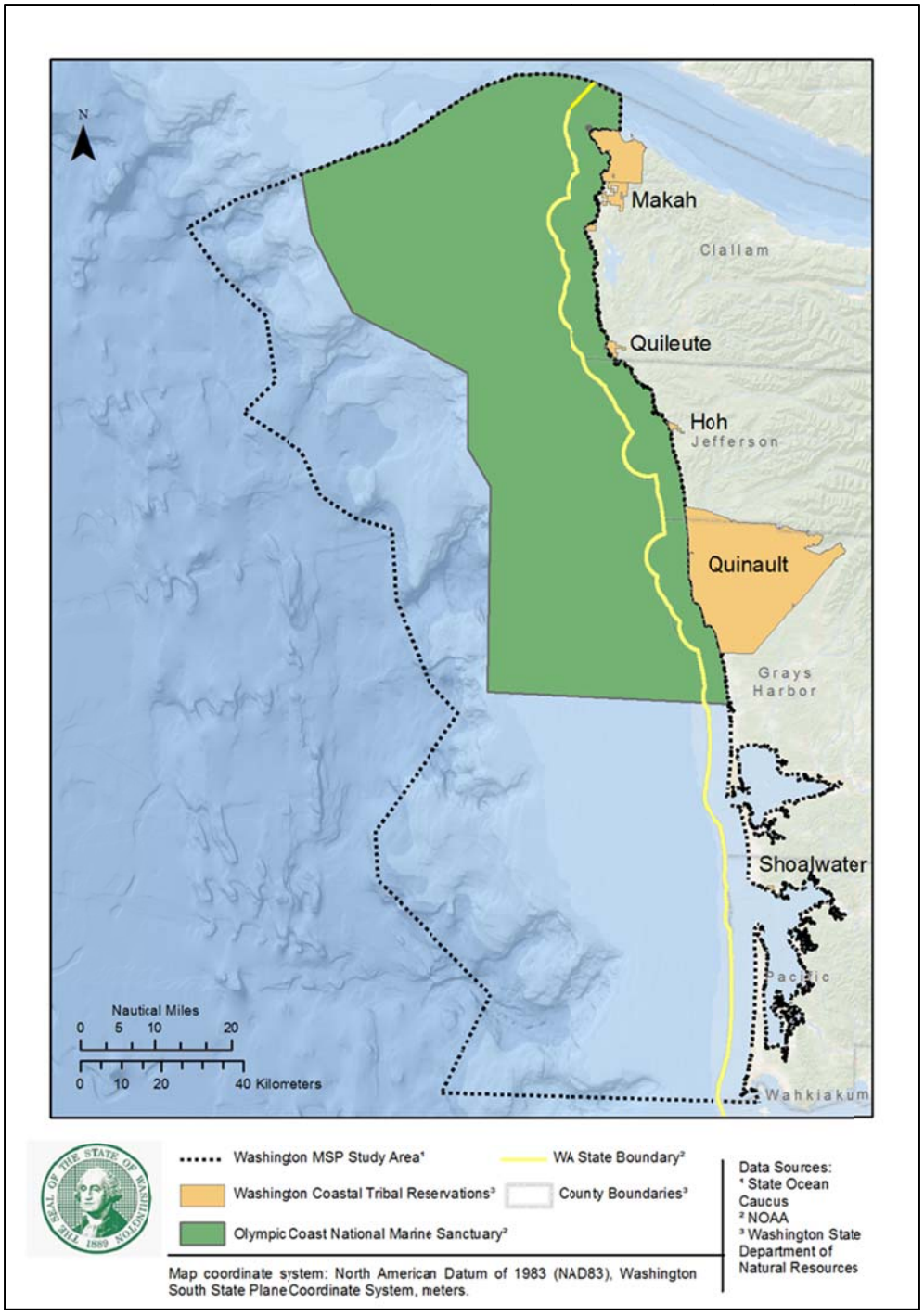

Figure 1. Washington Coast MSP Planning Area Boundary (Source: Washington Dept. of Natural Resources)

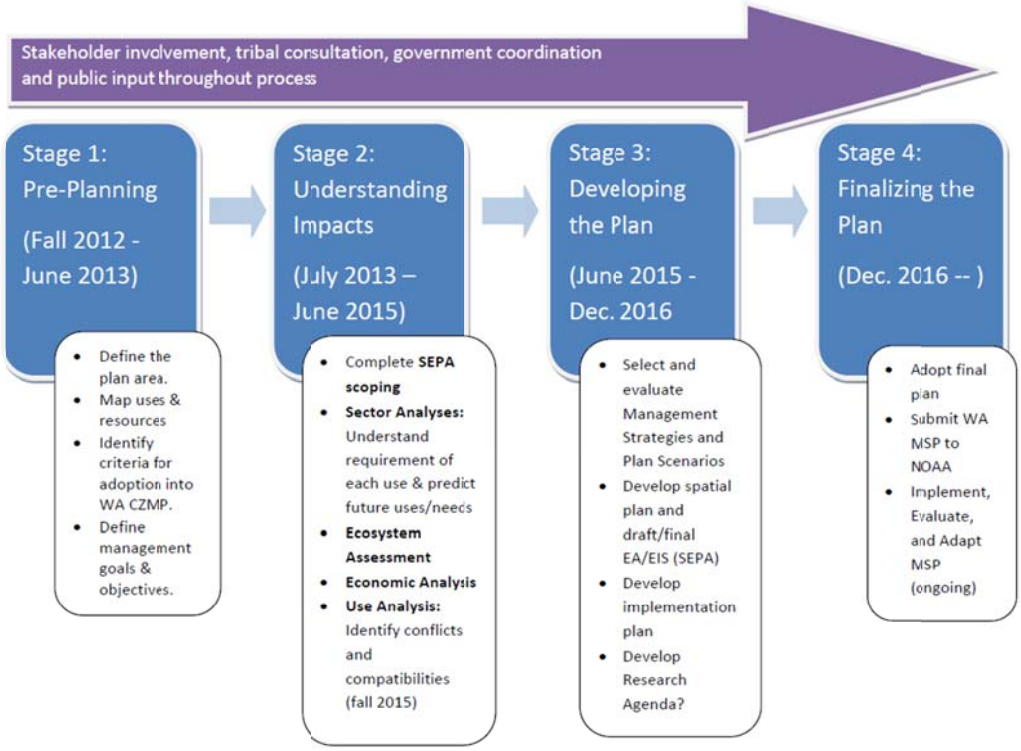

Figure 2. Washington Coast MSP Process (Source: Washington Department of Ecology)

The Rhode Island Ocean Special Area Management Plan: A Case Study of Fishermen Stakeholder Involvement in Marine Spatial Planning

Goal

Using examples from the U.S. Rhode Island Ocean Special Area Management Plan (Ocean SAMP), students will understand stakeholder participation by critically analyzing multiple strategies for engaging fishermen stakeholders in marine spatial planning (MSP) and offshore renewable energy development processes.

Learning objectives

Through reading and discussing this case study, students will:

1. **Critically analyze** fishermen stakeholders' stated and implied concerns, interests, and motives with regard to marine spatial planning and offshore renewable energy development.
2. **Compare and contrast** planners' formal and informal strategies for engaging fishermen stakeholders in both plan development and implementation, and **analyze** the real-world constraints that appear to have shaped these strategies.
3. **Critically analyze** the role and effectiveness of specific tools and strategies, including participatory mapping and the development of an advisory board, in this stakeholder process.
4. **Discuss and debate** whether or how elements of this stakeholder approach can and should be applied to other stakeholder groups or other settings.

Educational level

Undergraduate upper division; graduate school

Keywords

marine spatial planning; coastal management; ocean management; stakeholders; public participation; participatory mapping; fisheries; offshore renewable energy; use conflicts

Teaching This Case Study

This case study has been developed for students who have been introduced to coastal and ocean management concepts and tools; the concept and some examples of marine spatial planning; and basic tenets of stakeholder engagement. When teaching this case, we recommend using select accompanying materials (listed below) to provide students with a greater understanding of the Ocean SAMP, which they can draw upon when considering the suggested discussion questions. To delve more deeply into this case and connect it with planning theory and the academic literature, see "Expanding the Discussion" (below) for other suggested discussion questions and resources.

Accompanying materials

Green Fire Productions. 2014. "Ocean Frontiers II: A New England Story for Sustaining the Sea." *Ocean Frontiers* video, 45:22, posted by "Karen Meyer," September 12, 2014, https://youtube/bjkX0HMDl-8 [Use either the entire film or excerpts, as the Ocean SAMP story is woven throughout the film.]

McCann, J., S. Schumann, G. Fugate, S. Kennedy, and C. Young. 2013. *The Rhode Island Ocean Special Area Management Plan: Managing Ocean Resources through Coastal and Marine Spatial Planning.* A Practitioner's Guide. Online at http://www.crc.uri.edu/download/Practitioner_Guide.pdf. "Creating the Ocean SAMP," pp. 7-23.

Discussion questions

1. How would you characterize the fisheries stakeholders included in this case study? Who are they and what industries/interests do they represent? What seem to be their issues, concerns, interests and motives with regard to the Ocean SAMP and the proposed wind farm? How do these issues and concerns differ among fishermen?

2. What strategies did Ocean SAMP leaders use to engage fishermen stakeholders? How did strategies used during plan development and plan implementation/renewable energy permitting differ? What do you see as the benefits and limitations of these strategies?

    a. Participatory mapping was used during both plan development and implementation. This is often viewed as a simple technical data collection exercise. What role do you think participatory mapping played within the broader context of the SAMP fisheries stakeholder process? What are some benefits and limitations of this approach? What other ways can this type of data be collected?

    b. The "Fishermen's Advisory Board" (FAB) is a tool created as part of the SAMP and is not necessarily a widespread outcome of MSP processes. To what extent do you think the FAB influenced fishermen's participation in this process, particularly during plan implementation?

3. The Ocean SAMP has not had 100 percent participation and support from all members of Rhode Island's commercial fishing community. What level of participation and support should SAMP leaders try to attain from this stakeholder group, and what do you think is realistic? What is the benefit of trying to attain increased participation and support of this particular stakeholder group? How do practitioners ensure they are maximizing public participation?

4. Consider the views of non-participating fishermen as summarized on p. 11 of the case study narrative. What do you think of each of these concerns? Do you see any concerns as valid, and if so, why? Do you see some as not valid, and if so, why? For those concerns you see as valid, what do you think could have been done differently to address them?

5. Consider Rhode Island fishermen from the perspective of the Bureau of Ocean Energy Management (BOEM). In the narrative, the case study authors propose reasons why they

believe BOEM honored the FAB's request. What do you think? – might there be other reasons that the agency decided to remove Cox's Ledge from the renewable energy leasing area? What do you think would have happened if they had decided not to honor the FAB's request?

6. As users of the Ocean SAMP area, including the wind farm location, do you think that fishermen have been given privileged status as affected stakeholders? If so, why? Do you feel this was necessary and valid? Why/why not? If they were not given privileged status, do you think they should have been, or should be given that status in the future? Why/why not?

7. In your opinion, was fishermen stakeholders' participation in the SAMP a success or a failure? Why/why not?

8. Both practitioners and stakeholders interviewed for this case study shared a lesson learned that trust is critical to an MSP process (see Smythe et al. 2016). What do you think about this? Do you see evidence that trust was established through this Ocean SAMP process? If so, what strategies seemed to help build trust? Why do you think this is important?

Expanding the Discussion

Following are additional discussion questions, topics, activities and resources that could be used for more in-depth or scholarly analysis of this case study.

Discussion topics and activity suggestions

1. Do a brief search of the web and social media to check on the latest Ocean SAMP and Block Island Wind Farm news and events. What is the current status of the Block Island Wind Farm? Do any news and events address fishermen and fisheries in particular, and if so, what do they say? Do you see any evidence that planning leaders' commitment to continue engaging fishermen is being upheld?

2. Have students conduct background research on Rhode Island fisheries. What state and federal agencies manage Rhode Island fisheries and maintain landings data? What do landings data indicate about which fisheries are most active and most valuable to the state of Rhode Island? What types of fishing gear are used to target these fisheries? Can you tell whether these fisheries take place within the Ocean SAMP area?

3. The researchers who developed this case study identified lessons learned from the Ocean SAMP experience to share with practitioners and stakeholders throughout the world. (Their lessons learned can be found on pp. 57-62 of Smythe et al. 2016.) What are your lessons learned from studying this case? Can you expand upon the researchers' lessons learned?

4. Evaluate and critique the fisheries stakeholder process described here through the lens of "Arnstein's Ladder" (see Arnstein 1969). What level of citizen participation characterizes fishermen's participation in the Ocean SAMP? Do you think this level was sufficient and appropriate? If not, would you recommend a different level? Which one and why?

5. A 2016 article series in *Planning Theory and Practice* examines the winners and losers in marine spatial planning (see Flannery and Ellis 2016). One article argues that fishermen, in particular, are at risk for being among the losers (see e.g., Knol and Jentoft 2016; see also Jentoft and Knol 2014). Consider the Ocean SAMP fisheries stakeholder process from this perspective. Were Rhode Island fishermen both winners and losers? Do you feel they should have been engaged in a different manner, or that their concerns should have been given a different level of priority? What do you think about the idea that marine spatial planning must result in both winners and losers?

Additional academic resources

Arnstein, S. 1969. A ladder of citizen participation. *Journal of the American Planning Association* 35 (4): 216-224.

Douvere, F. 2008. The importance of marine spatial planning in advancing ecosystem-based sea use management. *Marine Policy* 32 (5): 762-771.

Flannery, W. and G. Ellis. 2016. Exploring the winners and losers of marine environmental governance. *Planning Theory and Practice* 17 (1): 121-128.

Gopnick, M., C. Fieseler, L. Cantral, K. McClennan, L. Pendleton, and L. Crowder. 2012. Coming to the table: Early stakeholder engagement in marine spatial planning. *Marine Policy* 36 (5): 1139-1149.

Jentoft, S. and M. Knol. 2014. Marine spatial planning: Risk or opportunity for fisheries in the North Sea? *Maritime Studies* 13 (1) [online].

Knol, M. and S. Jentoft. 2016. Marine spatial planning: 'it is better to be on the train than being hit by it.' *Planning Theory and Practice* 17 (1): 143-146.

Nutters, H. and P. DaSilva. 2012. Fisheries stakeholder engagement and marine spatial planning: Lessons from the Rhode Island Ocean SAMP and the Massachusetts Ocean Management Plan. *Ocean & Coastal Management* 67: 9-18.

Additional information on the Ocean SAMP

Smythe, T., N. Andrescavage and C. Fox. 2016. The Rhode Island Ocean Special Area Management Plan, 2008 – 2015: From Inception through Implementation. In McCann, J., Ed. 2016. *Case Studies of Marine Spatial Planning Report Series*. Coastal Resources Center and Rhode Island Sea Grant College Program, URI Graduate School of Oceanography. This is a technical report detailing the full case study referenced herein.

Olsen, S., J. McCann and G. Fugate. 2014. The State of Rhode Island's pioneering marine spatial plan. *Marine Policy* 45: 26-38.

Smythe, T. and J. McCann. n.d. Lessons from the Practice of Marine Spatial Planning: Findings from Three U.S. Case Studies. Submitted to Marine Policy spring 2016.

Please review other Ocean SAMP-related documents, including the plan itself, at http://seagrant.gso.uri.edu/oceansamp/

Please review other Coastal Resources Center publications on marine spatial planning at http://www.crc.uri.edu/initiatives_page/msp/

Case Study Narrative

The Rhode Island Ocean Special Area Management Plan: A Case Study of Fishermen Stakeholder Involvement in Marine Spatial Planning

I. Overview

In 2008, the state of Rhode Island, U.S. embarked on a comprehensive marine spatial planning (MSP) process for a 1,467-square mile (3,800-square kilometer) offshore area encompassing both Rhode Island state waters out to 3 nautical miles and federal waters an additional 27 miles offshore. This process, known as the RI Ocean Special Area Management Plan (Ocean SAMP) process, initially came about in response to the Rhode Island governor's establishment of a statewide renewable energy goal and selection of an offshore wind farm preferred developer, Deepwater Wind. Ultimately, however, the MSP approach was used to address multiple objectives. It resulted in a regulatory plan designed to achieve both marine conservation and sustainable economic development goals for these waters while streamlining decision-making for future offshore projects.

The Ocean SAMP process was led by the Rhode Island Coastal Resources Management Council (CRMC), the state's coastal management agency, in partnership with a team of coastal management specialists and scientists from the University of Rhode Island. Plan development took place from 2008 – 2010, with the plan achieving final state and federal agency approvals in 2010 and 2011. Final policies of the Ocean SAMP include:

- Designation of a 13 square-mile Renewable Energy Zone (REZ) southeast of Block Island, pre-selected as a preferred area for wind energy;
- Increased protection of 54 percent of the Ocean SAMP area;
- A streamlined regulatory process to evaluate offshore renewable energy proposals;
- Mechanisms to facilitate continued stakeholder engagement through a new Fishermen's Advisory Board (FAB) and Habitat Advisory Board (HAB); and
- Provisions for regular plan updates every five years to ensure adaptive management.

In 2015, an in-depth case study was developed about the process of developing and implementing the Ocean SAMP, focusing on plan implementation (2010-2015). The primary goal of this research was to identify lessons learned about the practice of marine spatial planning that could be shared with practitioners and stakeholders throughout the world. To develop these lessons learned, researchers conducted in-depth interviews with 15 practitioners and stakeholders involved in the Ocean SAMP

process. The following narrative is based on this research, which is detailed in a final case study technical report.[1]

II. Background: Ocean SAMP Development and Fishermen's Involvement

Developing the Ocean SAMP was an intensive research, planning and stakeholder process that took place over just two years. This process was led by a team including staff from CRMC and the University of Rhode Island (URI). It included multiple research projects led by URI scientists as well as policy development led by CRMC in partnership with URI. General stakeholder involvement took place through a stakeholder committee, comprising 50 organizations and the general public and chaired by an external volunteer, retired statesman Ken Payne. The committee met monthly for two years. The Ocean SAMP team also convened Technical Advisory Committees (TACs) made up of scientific and stakeholder experts in their fields to help write and advise on each chapter. Over the course of the two-year Ocean SAMP development process, the team held over 100 formal public meetings — including stakeholder meetings, TAC meetings and hearings. This figure does not include the countless informal meetings and interactions between the Ocean SAMP team and stakeholders and experts.

For many case study interview participants, it is the stakeholder process that stands out as the central feature of the overall Ocean SAMP process and what gave it lasting relevance. Interview participants explain how the stakeholder chair and management team designed the process to emphasize consistency of message (e.g., most meetings began with restating the SAMP goals); transparency (e.g., the leadership team let stakeholders see how decisions were made); and responsiveness of the process to stakeholder demands (e.g., the team granted a stakeholder organization's request that each individual chapter, as well as the document in its entirety, be given a full review and public hearing by the CRMC). This diversity of perspectives and motivations knit the process together and, according to interview participants, made for a stronger planning document in the end.

The Ocean SAMP team worked with the stakeholders who are also direct users of the SAMP area — commercial and recreational fishermen, mariners, and recreational boaters and sailors. Interview participants emphasized that fishermen's participation in Ocean SAMP development and implementation has been one of the most important yet complex aspects of this process. Commercial and charter-boat fishermen in Rhode Island and elsewhere are a stakeholder group with a clear economic dependence on the outcomes of marine spatial planning. Recreational fishing — a major contributor to Rhode Island's recreation and tourism economy — could also have been significantly affected by the MSP process. Commercial fishing in the SAMP area takes place year-round. It includes bottom trawling for species including flounder, cod and squid; mid-water trawling for herring and mackerel; dredging for scallops; gillnetting for monkfish and other finfish; rod and reel fishing for a variety of species; and trap fishing for lobster and some finfish species. These commercial fishing activities are often grouped as gear that is towed behind a boat, or mobile gear (e.g., trawling and dredging), or gear that stays in a fixed location for a period of time (e.g., gillnets and trap fishing).

[1] Smythe, T., N. Andrescavage and C. Fox. 2016. The Rhode Island Ocean Special Area Management Plan, 2008 – 2015: From Inception through Implementation. In McCann, J., Ed. 2016. *Case Studies of Marine Spatial Planning Report Series*. Coastal Resources Center and Rhode Island Sea Grant College Program, URI Graduate School of Oceanography.

Charter boat and recreational fishermen are active primarily in the warmer months — fishing either from shore or aboard private or charter boats and targeting species that include tuna, scup, bluefish and striped bass.[2] The varied nature of fishermen as a group, their dependence on ocean resources, and their understandable reluctance to share proprietary business information about the locations of their fishing activity have added a great deal of complexity to their participation in the Ocean SAMP process from the start.

Interview participants described how, in the early months of the process, large numbers of fishermen, representing nearly all sectors and gear types, attended SAMP stakeholder meetings and were very vocal. Fishermen expressed concerns about the early selection of a wind farm developer, the potential impacts of offshore wind on marine resources and, by extension, their livelihoods, and the possibility that the SAMP would add a new layer of regulations to already heavily-regulated fisheries. Some shared their belief that the wind farm was already a "done deal." Many fishermen conveyed their distrust of government, particularly acute in this case given that Rhode Island fishermen had not previously worked with CRMC, the state's coastal management agency (the state's fisheries are managed by a separate agency, the Rhode Island Department of Environmental Management). To respond to this existing mistrust, Ocean SAMP leaders convened numerous targeted stakeholder meetings solely for fishermen to discuss fisheries-specific issues and concerns; provided fishermen with access to specialized maps, charts, studies, and offshore wind farm experts; and even facilitated direct communication between fishermen and the state's chosen offshore wind farm developer. It also included ensuring an active 20-member fisheries Technical Advisory Committee (TAC), which included representatives of 10 commercial fishing organizations. Planners explained that the fisheries TAC and other topic-specific TACs were developed in order to provide opportunities for subject matter-specific input and discussion. The fisheries TAC was convened in multiple meetings and workshops to discuss the fisheries chapter of the Ocean Special Area Management Plan and fisheries research needs.[3]

One particularly important way fishermen were involved in Ocean SAMP development was through the process of identifying and mapping important fishing areas. During plan development, SAMP team members conducted a series of meetings and workshops with commercial, charter boat and recreational fishermen, and fishing groups throughout Rhode Island. These meetings included participatory mapping exercises designed to identify fishing areas and were facilitated in part by the SAMP team's fisheries liaison, Dave Beutel, a CRMC staff member who is a former commercial fisherman. These meetings resulted in a series of maps showing large polygons denoting commercial fishing usage areas (mobile gear), commercial fishing usage areas (fixed gear), and recreational fishing usage areas (combining charter boat activities and recreational angling) (see Figure 1). Fisheries were grouped by gear type because fundamental differences between gear types (i.e. whether a net is dragged behind a vessel or deployed in a location and left there for a period of time) determine the extent to which a fishery conflicts with other offshore uses. While the fisheries usage maps created through this process were only one of several sets of maps that sought to characterize fishing activity and were too low-resolution

[2] McCann, J. and S. Schumann with G. Fugate, S. Kennedy, and C. Young. 2013. *The Rhode Island Ocean Special Area Management Plan: Managing Ocean Resources through Coastal and Marine Spatial Planning.* University of Rhode Island Coastal Resources Center/Rhode Island Sea Grant College Program.
[3] McCann et al. 2013.

to be used to identify discrete important fishing areas, they nonetheless advanced understanding about fishing activity in the SAMP area.

The participatory mapping process had other purposes as well. First, it enabled Ocean SAMP leaders to receive fishermen's input on other mapping considerations, such as where they thought a wind farm could be sited and what they thought about siting a wind farm in an area southeast of Block Island that scientists had identified as a potential future Renewable Energy Zone (REZ). This input helped SAMP leaders confirm that the final REZ would have minimal impact on commercial, charter boat and recreational fishermen. Second, this process created an opportunity for dialogue between SAMP leaders and fishermen through which fishermen learned more about the MSP process and the proposed wind farm and SAMP leaders were able to better understand fishermen's issues and concerns and how best to address them through the SAMP process.

Finally, through these various processes, fishermen provided input on Ocean SAMP fisheries-related policies and regulations. Through their initial feedback on fisheries issues and concerns and their participation throughout the two-year SAMP development process, fishermen provided Ocean SAMP leaders with critical input that influenced policy development. Examples include mapping of important fishing areas, development of a fisheries mitigation policy, and the establishment of a new Fishermen's Advisory Board (FAB). First, although the Ocean SAMP process included fisheries mapping, it did *not* result in policies delineating and protecting high-intensity fishing areas. This is in part because Rhode Island offshore fisheries are very dynamic and not limited to discrete areas. Fishermen stakeholders emphasized these two points repeatedly throughout the process. Second, in response to fishermen's suggestions, the Ocean SAMP includes a mitigation policy to address any impacts to fishermen and fishing businesses from new offshore development. This policy was developed with fishermen's input and with the assistance of Ken Payne, who had previously worked with the fishing community on legislative issues. Third, as mentioned above, the Ocean SAMP codified a new stakeholder advisory group, the FAB. Through the FAB, nine commercial, recreational and charter boat fishermen could formally represent fisheries interests during Ocean SAMP implementation. The FAB advises the CRMC on the potential fisheries aspects of new offshore developments and other fisheries considerations, and the Ocean SAMP requires offshore developers to consult with the FAB on matters such as project location, construction schedules, fishing impacts and mitigation measures. The FAB's nine members include six from Rhode Island and three from the neighboring state of Massachusetts due to the "Area of Mutual Interest" agreement between the two states which shapes interstate coordination on wind development in adjacent federal waters. All of these policies were publicly vetted, refined and approved through the policy process but were initially included in response to fishermen's concerns and as an outgrowth of the fisheries stakeholder process.

III. Implementation: Establishing the Fishermen's Advisory Board

CRMC appointed the initial slate of nine FAB members in July 2011, 10 months after Ocean SAMP approval.[4] Members from Rhode Island and Massachusetts represent the range of fishing activities that take place in the SAMP area: lobster, bottom trawl, gillnet, scallop, recreational and charter. SAMP

[4] David Beutel, RI Coastal Resources Management Council, pers. comm. 2015.

policies provide only a rough outline of FAB operating procedures, largely leaving it up to appointees to decide how to run the advisory body.

Interviews revealed that, to date, the FAB has used this leeway widely. Early on, members realized their busy fishing schedules made it hard to attend meetings. At their request, CRMC initiated a public process to amend the Ocean SAMP to allow for one alternate member per fishery gear group. FAB members themselves appointed individuals to fill these slots. Through a similar public process, the FAB also secured a change in the regulations to recognize one FAB member as the official chairperson in charge of managing meetings. Despite the designation of alternate representatives, FAB members continued to struggle with the complications of fitting meeting attendance into their busy fishing schedules. So, they requested and obtained approval from CRMC for a further accommodation — for the FAB to conduct its business over email.

These regulatory changes — allowing for alternate members and providing recognition for a chair to run FAB meetings — are among very few official changes to have taken place so far to Ocean SAMP policies. To CRMC Executive Director Grover Fugate, these custom modifications of the functioning of the FAB indicate a high level of investment among its members. "Fishermen took possession of the FAB," Fugate observed, "which is what it was set up to do. They really laid claim to it. And they're using it to their maximum advantage."

FAB chair Bill McElroy concurred: "You have to have a formula, a process, by which you can say, 'There's an issue that I need to talk to someone about.'" McElroy explained his view that the FAB gave fishermen a voice that will be heard in development decisions: "If it wasn't for the FAB, and I didn't have that line of communication with Deepwater Wind [the wind farm developer], I try to imagine how we'd ever find out things and put input into things. Basically, I would be a lone individual fisherman calling up the central switchboard at some giant company." As the following story illustrates, the FAB has used its voice to exert influence in the development of the SAMP area.

IV. The FAB Exerting Influence: Cox's Ledge and the Offshore Leasing Process

Soon after the Ocean SAMP was completed, and before the FAB was officially appointed, fishermen were alerted to another issue of concern in Rhode Island's offshore waters. In late 2010, the federal Bureau of Ocean Energy Management (BOEM) began the public process for issuing offshore renewable energy leases in federal waters included within the Ocean SAMP area. This process begins with a "Call for Nominations and Information," which leads to the designation of a "Wind Energy Area" where future leases will be issued.

Cox's Ledge, an area in federal waters to the southeast of Rhode Island, is heavily used by both commercial and recreational fisheries. "Cox's Ledge is the backbone of the ecosystem — of the multitude of species that migrate through southern New England," said fisherman Fred Mattera. CRMC staff explained how, throughout the Ocean SAMP development process, fishermen emphasized the importance of this area to their activities and thus may have assumed it was off the table for wind farm development. Hence, they were dismayed to learn in December 2010 that BOEM's newly-released map

of the "Call Area" (see Figure 2) included this valuable fishing area. This area would eventually become the Rhode Island/Massachusetts (RI/MA) Wind Energy Area.

What happened next suggests that the trust developed between CRMC and fishermen through the Ocean SAMP process had, to some extent, given the fishing community greater influence in the larger landscape of offshore decision-making. Fishermen raised concerns over the inclusion of important fishing grounds on Cox's Ledge within the proposed leasing area. To address this issue, at the urging of FAB members, many fishermen provided CRMC with their proprietary individual fishing histories. Ocean SAMP leaders then combined this information to create maps showing areas of high fishing intensity (see Figure 3). Such maps were never created through Ocean SAMP development because fishermen had not previously shared such high-resolution data. The maps, color-coded according to number of fisheries gear types (e.g., lobstering, scalloping), proved what fishermen had been saying all along: Cox's Ledge is used intensively by a larger number of gear types than surrounding areas, and hence it is one of the most important fishing grounds in Southern New England.

Next, the fishermen — acting through the FAB — submitted a summary map to BOEM, along with a request to change the Call Area by removing Cox's Ledge. Fugate explained that although CRMC had developed the map, with URI technical support, the agency could not submit it directly because the state of Rhode Island wished to be cautious about favoring one business interest (fishermen) over another (wind energy developers) at this early stage in the process.

Since the FAB request for a change in the Call Area was not presented as part of a formal public comment period, BOEM was under no legal obligation to consider it. However, BOEM did so, and in February 2012 removed a large swath — about 205 square miles — of Cox's Ledge from leasing, making the final RI/MA Wind Energy Area about 20 percent smaller than the original Call Area (see Figure 4).[5] This led to the opening of a competitive lease sale — the first in the nation for wind energy — in July 2013, for two clusters of lease blocks.[6]

There may be several reasons for BOEM's decision to honor the fishermen's request. When the Ocean SAMP was approved by the National Oceanic and Atmospheric Administration (NOAA) as part of the state's federally-approved coastal management program, the FAB attained formal standing because it was established through the Ocean SAMP. However, there also may be other less formal reasons. The first is that the FAB had earned a solid reputation as the central voice for fishermen on MSP issues that surpassed that of its formal role outlined in the SAMP. The second is that detailed, verifiable data and information from a number of sources backed up the request. The third is that BOEM itself recognized the importance of maintaining relationships with important marine stakeholders such as fishermen and their representatives in the FAB and ultimately made a decision that honored and reinforced those relationships.

[5] Office of Senator Jack Reed. February 24, 2012. "RI Advances Commercial Offshore Wind Energy Development- Removal of Cox's Ledge from "Wind Energy Area" a victory for RI fishermen." Online at http://www.reed.senate.gov/news/releases/ri-advances-commercial-offshore-wind-energy-development. Last accessed December 1, 2015

[6] U.S. Bureau of Ocean Energy Management. N.d. *Commercial Wind Lease for the Wind Energy Area Offshore Rhode Island and Massachusetts.* Online at http://www.boem.gov/Commercial-Wind-Lease-Rhode-Island-and-Massachusetts/. Last accessed December 1, 2015.

V. Fishermen's Non-Participation

Although certain FAB members have been extremely active in Ocean SAMP implementation, interview participants and other observers confirm that most Rhode Island fishermen — including members of the FAB — have not actively engaged in the implementation process. What is unclear are the reasons for the non-participation. Is it because nonparticipants are already satisfied with the way FAB leaders are representing their interests? Is it lack of awareness about the Ocean SAMP? Is it the time demands that participation would put on them? Or, is it a symbolic or strategic rejection of the Ocean SAMP or even of government management more broadly?

This last conjectured reason — i.e., that fishermen may not see the Ocean SAMP as legitimate — is an important one. Ken Payne, who has long worked with the fishing community on legislative issues, noted the profound differences of opinion among Rhode Island fishermen about the values which should underlie fisheries regulation and management and observed that this underlying divide likely explains some of this group's non-participation. Fishermen who fundamentally reject the principles of marine spatial planning do not participate in the Ocean SAMP, effectively leaving them out of the MSP process. This, in turn, makes it less likely that the process will effectively represent them. Members of the FAB, the primary vehicle for ongoing fishermen's participation, are individuals who already believe in and support the MSP process and the Ocean SAMP, although this is not a prerequisite for FAB membership. The bottom line is the FAB has no formal involvement of those fishermen who view the Ocean SAMP as illegitimate or not worth their time and effort, leaving this group unrepresented. Not surprisingly, invitations to nonparticipating fishermen to be interviewed for this case study were mostly unsuccessful. However, an interview with one skeptical fisherman, coupled with the perspectives of skeptical fishermen interviewed for the 2013 Ocean SAMP Biennial Assessment,[7] revealed several criticisms of Ocean SAMP implementation. Some of these fishermen:

- Are displeased the FAB is not elected by fishermen but rather appointed by CRMC (initially) and by its own members (subsequently), arguing that its appointed nature cushions it from accountability to the greater industry;
- Argue that the FAB meetings are in practice not open to public, and so stakeholders who would like to attend have no way of doing so; and
- Argue that the process used to select FAB members is biased, and the people chosen are not representative.

Ocean SAMP leaders interviewed for this study explained that, whereas the state of Massachusetts appointed their three representatives, the six FAB members initially appointed by the state of Rhode Island were all individual who applied and fit the application criteria; no qualified applicants were turned down. They further indicated that FAB meetings are indeed open to the public, even though they are not required by state law to be advertised. Nonetheless, these criticisms, in contrast with other case study findings about fishermen's trust of and influence in the decision-making process, highlight the

[7] Mulvaney, Kate. "First Biennial Assessment of the Rhode Island Ocean Special Area Management Plan Process." Assessment prepared for the Rhode Island Coastal Resources Management Council and the University of Rhode Island Coastal Resources Center, 2013.

complexity of fisheries issues and engaging fisheries stakeholders in an MSP process. Arguably, no planning effort can include and speak for each and every person. Nevertheless, watching how this reality continues to play out in Ocean SAMP implementation, particularly as the wind farm is constructed, will be important in better understanding this stakeholder group and their past and future involvement in marine spatial planning.

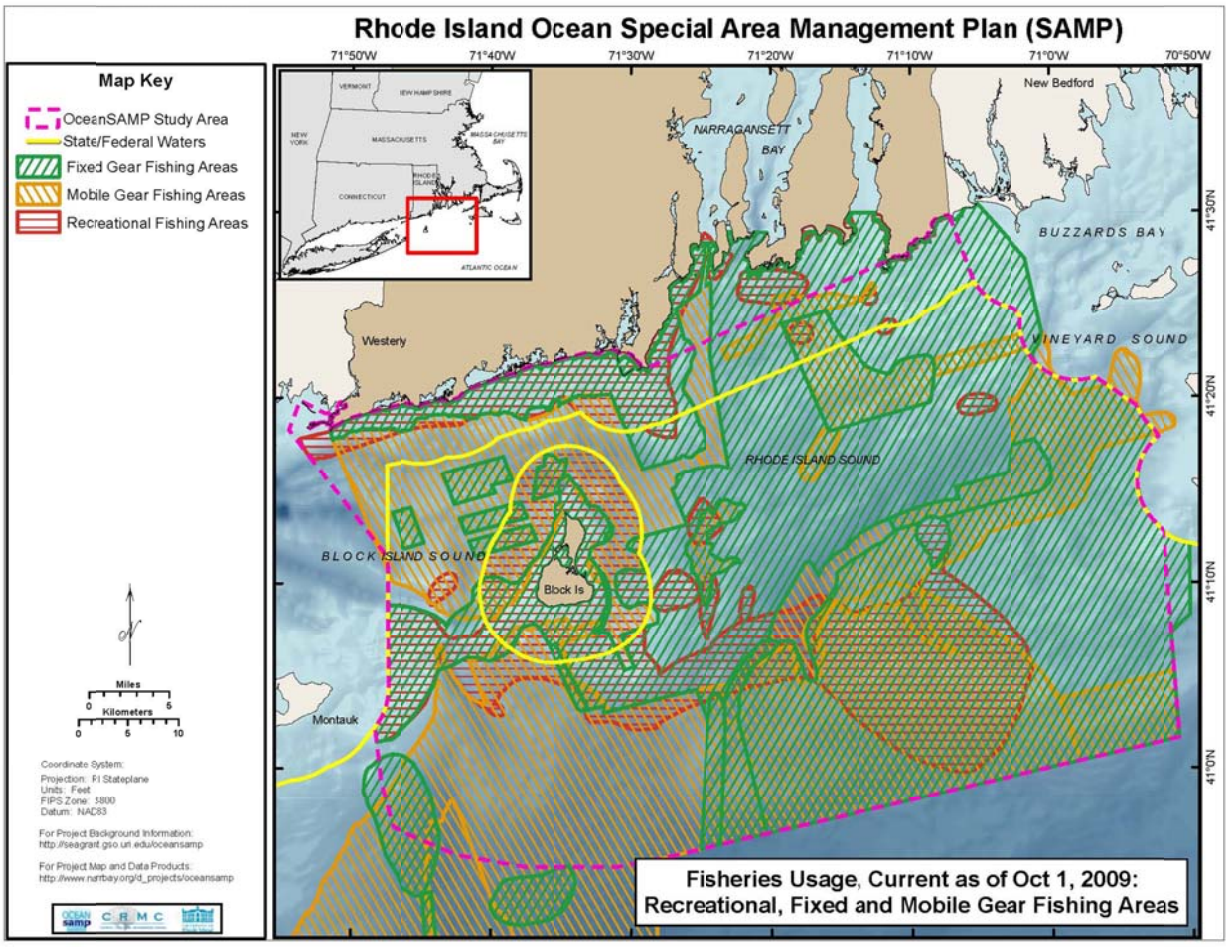

Figure 1. Fisheries usage map created through Ocean SAMP participatory mapping process (Source: CRMC/URI)

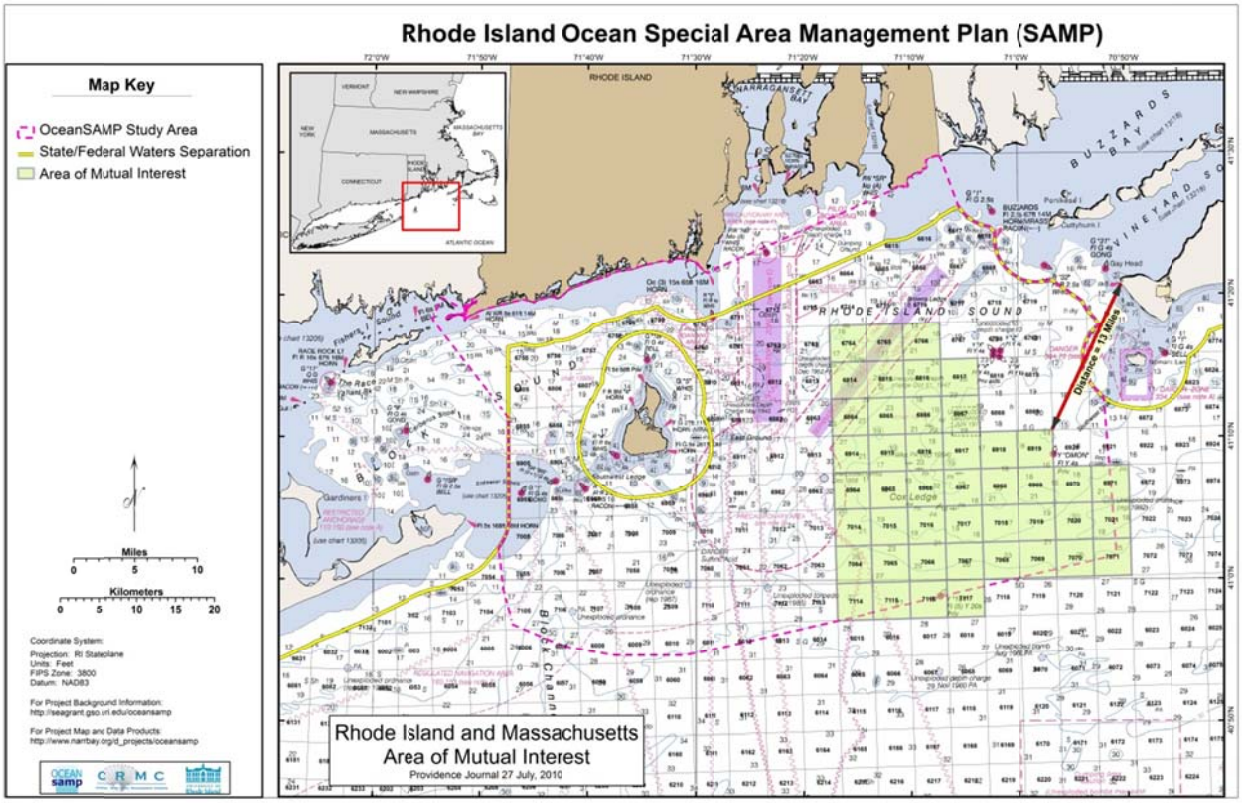

Figure 2. Lease blocks included in BOEM's 2010 Call Area (Source: CRMC/URI)

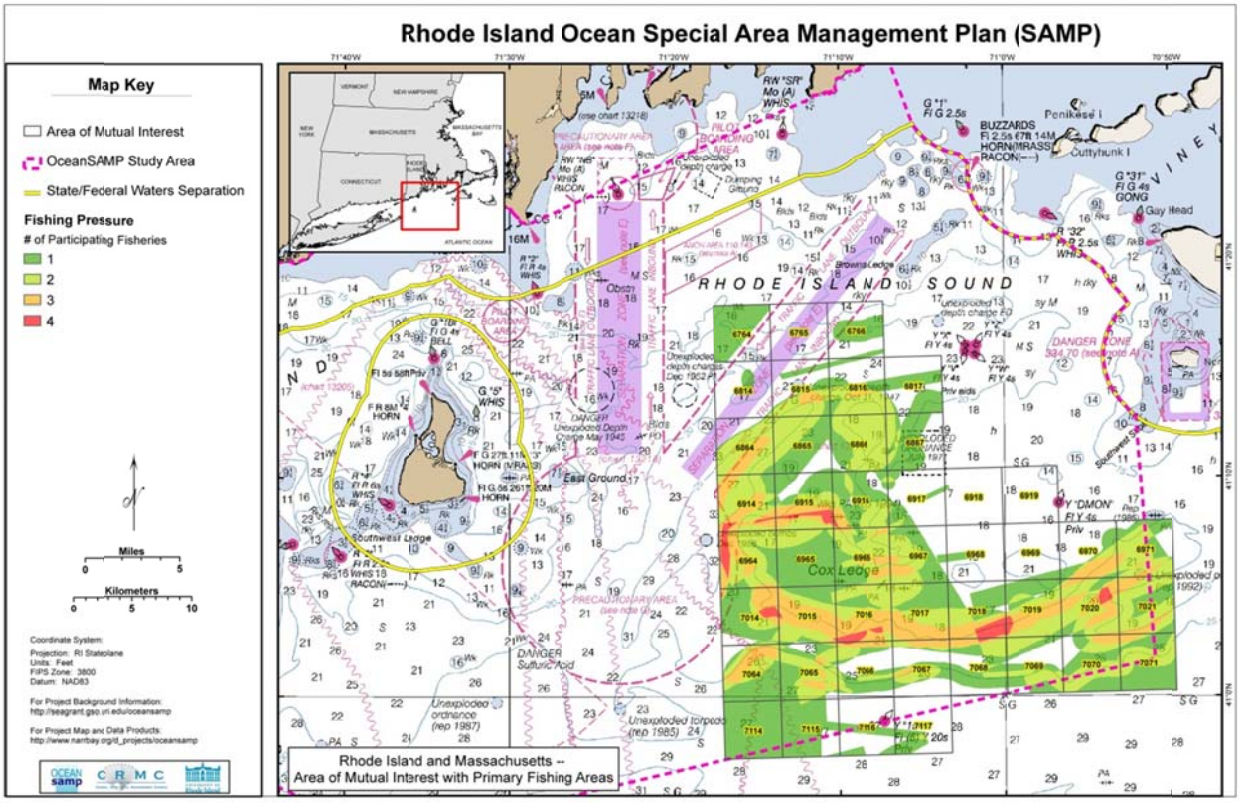

Figure 3. New fishing intensity data shown within BOEM lease blocks (Source: CRMC/URI)

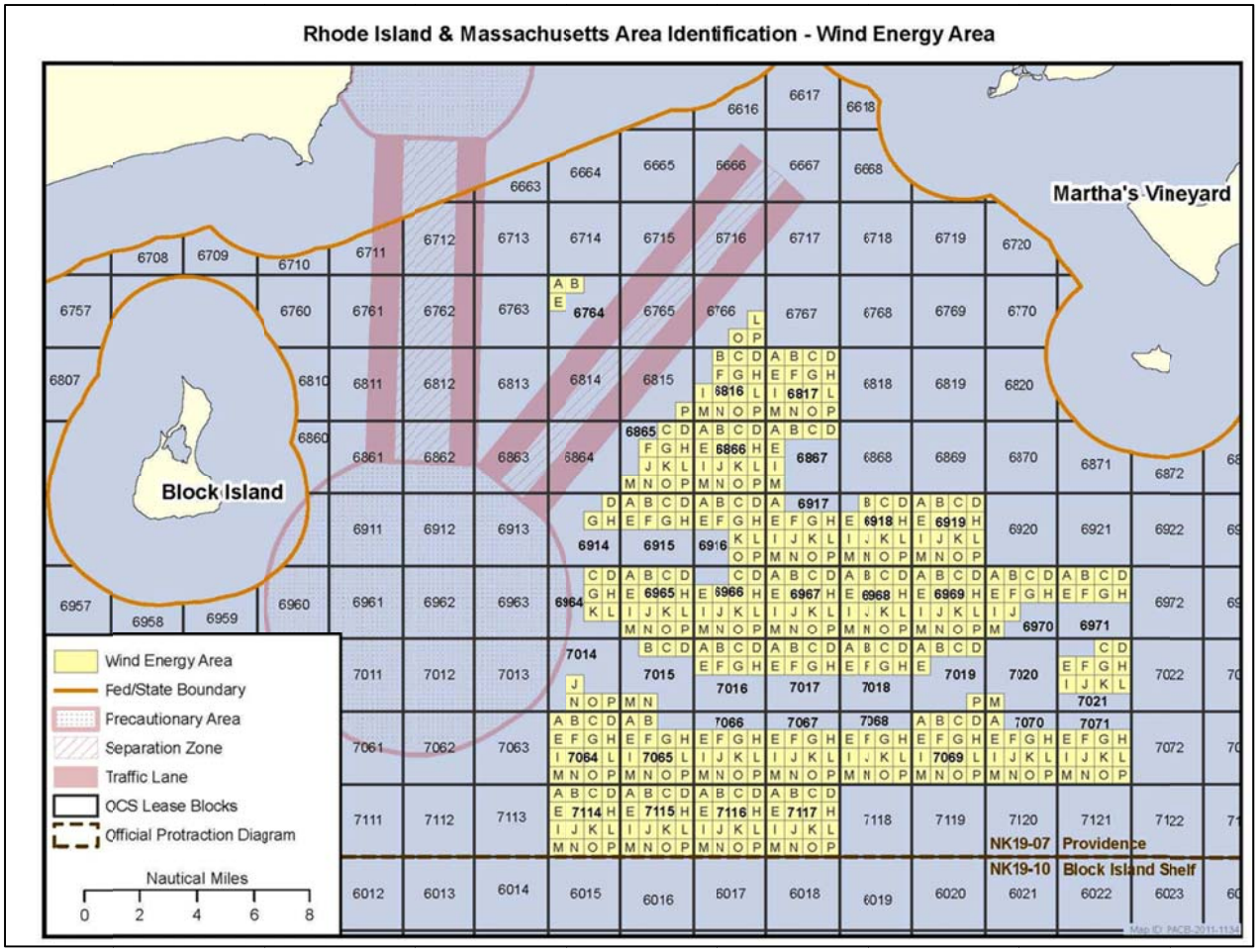

Figure 4. Final Lease Blocks included in BOEM's RI-MA Wind Energy Area (Source: BOEM)